RESEARCH REPORT No.7

Canada Pension Plan Fund: Options for Ontario

Blue Apple Consulting Inc., 1987

Ontario

Task Force on the Investment of Public Sector Pension Funds

CANADA PENSION PLAN FUND: OPTIONS FOR ONTARIO

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Prepared by:

Blue Apple Consulting Inc.
July, 1987

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PREFACE

The Task Force On The Investment of Public Sector Pension Funds has been instructed to enquire into the investment practices and experience of Ontario's public sector funds, and to examine alternative investment approaches and their implications. Included in the ambit of the Task Force review is Ontario's use of the Canada Pension Plan (CPP) investment fund.

The Canada Pension Plan has been in existence for two decades. As a partially-funded plan, it generates annually a surplus for investment which is currently invested exclusively in government bonds. Ontario has the option to borrow each year a little more than one-half of the available surplus. In fiscal 1986-87, the Province's entitlement was $1.2 billion and outstanding indebtedness to the CPP approximately $ 16 billion.

During the pension reform debate of recent years, questions have been raised by governments and various private sector groups about the implications of changes to the CPP. Issues relating to contributions and funding are now largely settled. However, the question of investment strategies for the CPP Fund has still to be addressed.

Blue Apple Consulting, Inc. was commissioned by the Task Force to review the investment of CPP funds in Ontario and to explore options for change. In keeping with the broader Task Force mandate, this involves investigating such matters as:

- the nature of the pension deal;
- investment performance and fund projections;
- investment objectives and strategies;
- investment management structures;
- federal-provincial implications; and,
- public perceptions.

We are pleased to present this report to the Task Force and at this time to acknowledge assistance received from the Ontario Treasury, the federal Departments of Insurance and Finance, a number of consultants to the Task Force, and the Task Force research staff.

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OVERVIEW OF THE REPORT

Investigation of investment options for the Canada Pension Plan must take fully into account its basic nature and funding as well as investment objectives and performance. The Canada Pension Plan is social insurance. Its funding has been structured so that contributions plus investment earnings exceed benefits plus expenses, generating a surplus for investment. The investment objectives have not been well defined; however, at one time or another, the following four objectives have been identified with the CPP Fund:

- meet contingencies;
- support provincial borrowing;
- promote regional development; and,
- maximize the rate of return.

The surplus was created originally to provide provincial governments with a source of debt financing to support regional economic development. However, no economic development criteria were established or constraints placed on the use of funds. It was simply assumed that governments would apply the funds in an economically-optimum fashion. Maximizing

Fund rate of return or providing for contingencies were not, insofar as we can determine, explicit objectives at the genesis of the CPP.

Subsequent debate on pension reform raised issues relating to the funding of the CPP and investment of Fund surpluses. Ottawa and the provinces decided to maintain the CPP investment fund as a contingency reserve, and to continue the practice of investing the surplus in government bonds exclusively. Thus, continued support for provincial borrowing was assured and, as before, the funds could be used for any purpose. Maximizing Fund rate of return has never been and is not today established as an objective.

We find there is a serious lack of clarity about CPP investment objectives and possible conflicts between them seem to have been largely ignored. Moreover, after taking its full CPP Fund allotment over many consecutive years, Ontario recently opted to turn down available funds, thus calling into question even the original economic development objective, at least as far as Ontario is concerned. A review by the Province of the application of its portion of the CPP Fund is clearly needed.

Executive Summary

The alternatives discussed in this study assume that the Province remains liable for the capital and interest on any borrowings by itself or its agencies from the CPP. Thus, from the perspective of CPP contributors, nothing really changes. At issue is the manner in which the borrowed CPP surplus funds are re-invested by the Province to benefit Ontarians.

CONCLUSIONS AND RECOMMENDATIONS

The following are the major conclusions of our study of CPP Fund investment options and implications:

1. The Canada Pension Plan is a social insurance scheme and as such is fundamentally different from other pension plan arrangements.

2. Investment objectives for the CPP Fund lack clarity.

3. There are no legal impediments to Ontario adopting new investment objectives and strategies in respect of its portion of the CPP Fund.

4. All options have political implications which should be evaluated with great care.

5. Re-investment by Ontario of its portion of the CPP Fund in the capital markets with the primary objective of maximizing the rate of return/risk trade-off would create the potential to earn a spread and promote the objective of economic development in the province.

6. The most effective and perhaps least contentious investment strategy would be phased-in investment of the funds in the private capital markets.

7. An arm's-length Crown agency would be the most appropriate investment management structure to make capital market investments and manage the portfolio.

8. There are no significant intergovernmental implications if Ontario changes its approach, provided it does not seek participation of the other provinces or intend to engage in direct re-lending to other governments.

Accordingly, we recommend:

1. The Task Force advise the Government to adopt the objective of maximizing the rate of return on the re-investment of CPP surplus funds.

2. The Task Force advise the Government that this objective can be achieved best by the strategy of investing the CPP surplus funds in the private capital markets.

3. The Task Force advise the Government that the most appropriate investment management structure for the re-investment of CPP surplus funds would be an arm's-length agency.

The above recommendations assume that free capital markets, on balance, would in the future allocate funds with greater efficiency than other mechanisms. We wish to stress that Ontario's past practice of re-investing CPP surplus funds in public sector projects has not in any way represented an unwise use of the funds. Such projects produce "social" rates of return which can be considerable; however, these returns are in practice difficult to measure and compare with private market returns.

A summary of our findings follows.

THE NATURE OF THE CPP

The Canada Pension Plan (CPP) is a fundamental part of Canada's retirement income system. It is sufficiently different from private pension plans that the standards of funding required of private plans are not applicable to the CPP. The Plan has the nature of social insurance; its security rests fundamentally on the ability of the state to tax and the willingness of taxpayers to pay. CPP contributions are levied in the form of a payroll tax.

Executive Summary

As proposed originally by the federal government, the CPP was to be "pay-as-you-go" funded, which is to say that annual contributions would just meet expenditures each year. No investment fund would have accumulated. However, federal-provincial negotiations produced a partially-funded Plan with an excess of contributions over expenditures and an accumulating investment fund.

Recent federal-provincial agreement on a formula for refinancing the Canada Pension Plan produced a schedule of contribution rate increases over the next 25 years which are designed to finance expenditures and maintain in the long run an investment fund in any year equal to approximately twice the expenditures of the following year.

The CPP investment fund totals approximately $37 billion currently and is projected to grow to $74 billion by the year 2000. By the year 2100, it is projected to reach over $16 trillion; however, the ratio of the Fund to expenditures which is projected at approximately 2.0 would be less than half today's peak of 4.5-5.0. In practical terms, the CPP will become virtually pay-as-you-go financed.

Executive Summary

FUNDAMENTAL OBJECTIVES OF THE CPP

The Canada Pension Plan had two original and fundamental purposes, one major and one subsidiary. The primary, and joint federal-provincial purpose was the provision of retirement income. The subsidiary, and essentially provincial purpose was the recycling of surplus CPP funds for regional economic development through lending to participating provincial governments and their agencies, thus overcoming capital market limitations.

The provision of retirement income remains today the fundamental objective. The use of surplus CPP funds for economic development purposes, at least in Ontario, appears to be losing priority, and a re-examination is required of the role of the CPP investment fund in Ontario to determine appropriate objectives and investment strategies. Capital needs and availability vary across the provinces and approaches to the re-investment of CPP funds will differ.

CPP INVESTMENT FUND OBJECTIVES

The purpose of the CPP investment fund is not stated in the legislation. However, as noted in "Overview of the Report" above, four objectives have been identified, at one time or another, for the CPP investment fund, namely:

(i) meet contingencies;
(ii) support provincial borrowing;
(iii) promote regional development; and,
(iv) maximize the rate of return.

These objectives can be obviously in conflict and each raises important questions. For example, which rate of return is implied, the "market" rate or the "social" rate? Who benefits from the fund earnings, CPP beneficiaries or society at large? What is the nature of the contingencies the CPP could face? What is "economic development"? Such questions must be addressed in considering the role of the CPP fund and investment objectives. Our findings with respect to these four objectives are as follows:

Meeting Contingencies

Evidence provided by the structure of the CPP funding formula and our research indicates that a contingency reserve role has been established for the Fund. However, given the serious nature of the events which would have to occur to jeopardize CPP pensions, our ability to insure against such contingencies and indeed the contingency fund objective itself must be called into question. Anyway, it would not make much sense for Ontario alone to adopt this objective.

We find the nature of possible contingencies has not been addressed adequately and the "reserve" role for the Fund to be similarly ill-defined. It is true that a liquidity reserve equal to three months of benefits is maintained on an ongoing basis, thus providing a level of protection against unforseen shortfalls in cash flows. It is also true that a larger fund could provide a more substantial buffer to smooth contributions and maintain benefits while political leaders found solutions to more serious contingencies. However, the current practice of investing the CPP Fund in non-marketable, fixed-term provincial and federal long bonds with no clear expectation that governments will ever repay the debt is entirely inappropriate for such a function. To meet contingencies, investments should be secure and relatively liquid.

Support for Public Borrowing

Provincial borrowing from the CPP was a fundamental feature of the original arrangements and endorsed de-facto by the recent financing amendments.

Until recently, Ontario took up its full allotment of CPP funds. On-going lobbies for more public funds for capital investments in schools, hospitals, roads and environmental-protection and other infrastructure suggest we cannot assume the Province will not need to borrow substantial funds in the future.

The Province could continue to borrow CPP funds to help finance such needs. However, Ontario has a strong credit rating and there is no indication that funds will not be available on reasonable terms in the private capital markets. The Government does not appear to need support from the CPP for its borrowing activities.

There is also an option for Ontario to make a portion of its CPP fund allotment available to other provinces or to local governments. However, this option could create political problems and there is no economic justification for it.

Promoting Economic Development

The creation of the CPP investment fund and recycling of the surplus for regional economic development had its origin in a perception by the provinces of a growing need for economic and social capital infrastructure, and the opportunity CPP funding presented to finance such capital investment without having to raise taxes or resort to public borrowing. Economic development, or "economic enhancement" in the parlance of the Task Force, does not seem to have been defined beyond the implicit objective of promoting rising standards of living in the provinces of Canada.

In Ontario, most of the CPP funds borrowed have been used for general purposes, although there is some evidence that the Government's borrowing, in total, has been balanced by capital investment. Because of difficulties in defining capital investment and imputing social rates of return, the precise impact of such investment on economic development is difficult to measure.

For those who believe in the competitive market system, the potential exists for Ontario to re-invest its portion of CPP surplus funds and earn a measurable spread between the cost of borrowing from the CPP and the rate of return on investments in the private capital markets. Such action would promote economic development, and in a modest and indirect way strengthen the security of future CPP pensions.

Maximizing the Rate of Return

Maximizing the rate of return on the Fund does not appear to have at any time been an explicit investment goal. In fact, the new funding formula diminishes the importance of the Fund relatively, and higher fund earnings would have little effect on either the contribution rates or pension benefits of Ontarians. Moreover, even if Ontario invested its portion of CPP surplus funds differently and at higher yields, under existing legislation there is no mechanism whereby the extra income could be returned to the Fund. The real security behind debt owed by Ontario to the CPP is the Province's tax base and wealth.

As noted previously, the security of the pension promise rests plain and simply on the ability of government to tax and and the willingness of taxpayers to pay. Neither the CPP Fund nor the rate of return it earns have much to do with the provision of retirement income.

Nevertheless, maximizing the rate of return/risk trade-off appears the most sensible future objective for the Ontario portion of the Fund. It directly promotes economic development and supports indirectly the other objectives identified above. Capital market criteria rather than elusive social rates of return/risks should govern investment decisions.

It is our belief that the primary objective for Ontario in its use of CPP funds should be to maximize the rate of return/risk trade-off. Pursuit of this goal would promote economic development and ultimately the provision of retirement income through taxes levied on an expanding economic base. The fact that under current CPP arrangements Ontario can promote this objective only indirectly on behalf of Ontarian CPP beneficiaries does not diminish its relevance.

The Ontario portion of the CPP fund would be invested, with the difference between assets (capital market investments) and liabilities (debt owed the CPP) being for the interest of Ontario taxpayers, not CPP beneficiaries. The latter group's interests would continue to be protected by the Government of Ontario's debt guarantee.

CPP FUND INVESTMENT STRATEGIES

We have identified four possible investment strategies for Ontario with respect to its portion of the CPP Fund and have assessed their implications in terms of the above objectives. These strategies are:

1. the status quo;

2. private/public investments;

3. public sector investments; and,

4. investment in the private capital markets.

1. The Status Quo

Available CPP funds could continue to be borrowed by the Province for general purposes on an "as needed" basis and when the terms and conditions are more attractive than those available in the private capital market.

We have concluded this strategy would be unwise because:

- the Province could be accused of "opportunistic" use of CPP funds and its motives misconstrued; debt management objectives, not economic enhancement--as envisaged originally--would control use of CPP funds;

- the federal government, as the residual borrower, would be forced to deal with potentially wide gyrations in its CPP borrowings driven by capital market conditions, and be required to take the "high-cost" money;

- the allocation of CPP investment capital would not be optimal. The Province would be using CPP funds simply as a cheap source of debt financing; and,

o such a policy could not be defended in terms of (i) maximizing rate of return; (ii) providing a contingency fund; or (iii) economic development. re-negotiation of the arrangements would appear inevitable.

2. Private/Public Investments

CPP funds could be borrowed by the Province and invested in projects which have social priority and have the potential to generate rates of return comparable to those obtainable in the private sector, but which need public investment to get them started. In this approach, public and private capital work together, but no public subsidies are involved. Examples of such social priorities are venture capital for small business, non-conventional energy projects, high-technology research and development, mortgage financing, industry salvaging and regional development. This strategy could also encompass support for the borrowing other governments via direct placements or capital market operations.

The difficulties here are considerable: identifying and ranking priorities would be politically contentious; the measurement of costs and benefits would be difficult, thus compromising accountability; it may be hard to avoid public subsidies; and, there may be concern about the Government misusing control over a growing pool of CPP funds to tamper with private sector activities. Moreover, this approach begs the question why the CPP is to be the source of funds for such purposes, rather than public borrowing, taxation or expenditure programs, particularly if public subsidies are provided.

3. Public Sector Investment

CPP funds could be invested in projects which have social priority and for which private sector capital is unavailable because either the rate of return or risk cannot be measured, the private rate of return is judged too low or the private risk judged too great. Since the risk of public subsidy is considerable in such instances we have termed this strategy "public sector investment".

Examples of such projects include the CANDU nuclear-power technology, the Sky-Dome, Ontario Place and Go-Transit. Most projects would include public subsidies, at least in their start-up phases. The principal objections to this approach for the Ontario portion of the CPP Fund are: (a) it has all of the faults of the previous one; (b) the existence of a large fund could distort public priorities, encourage undue risk taking and create unrealistic expectations; and, (c) the use of CPP funds to subsidize projects might be misconstrued as somehow undermining the security of the CPP.

Ontario CPP funds could of course be used to some degree to finance public sector projects--including projects subsidized by the Government-- but on private market terms and conditions.

4. Investment in the Private Capital Market

Maximum available CPP funds could be borrowed by the Province on the legislated terms and conditions, and then invested in the private capital market via either in-house or arm's-length investment management structures.

Investment of Ontario's share of CPP funds in the capital markets would ensure a more efficient allocation of scarce capital resources than is the case at the present time. As noted previously, the primary investment policy goal should be to maximize the rate of return/risk trade-off. The best strategy to achieve this is investment through the capital markets.

With reference to investment strategy, we have concluded: (i) the use of CPP funds for explicit private/public or social investments would be unduly complex and that other policy instruments would be more appropriate for such purposes; (ii) the status-quo is undesirable; and, (iii) investment in the capital markets is the best strategy to maximize returns and achieve the economic development objective.

INVESTMENT MANAGEMENT STRUCTURES

New investment strategies imply new investment management structures. Unless the present CPP legislation is changed, only the federal and provincial governments or their agencies may have direct access to surplus funds and governments are required to guarantee repayment. New investment structures must incorporate this reality. There are several possible structures, as outlined below.

1. Investment through the Consolidated Revenue Fund. This is compatible with investment strategies 1, 2 and 3.

2. In-House Portfolio Investment. This is consistent with strategy 4 only.

3. Creation of a Semi-independent Government Agency. This approach is compatible with investment strategies 3 and 4 above.

4. Creation of an Arm's-length Investment Agency along the lines of OMERS, which could handle CPP and/or other Ontario sector public pension funds. This structure supports investment strategy 4.

1. Investment Through The Consolidated Revenue Fund

A Cabinet Committee, or similar group, could be structured to invest CPP surplus funds in areas of public priority under investment strategies 1, 2 or 3 (the Treasurer and the Management Board of Cabinet are presently responsible for deciding the application of CPP surplus funds). Difficulties here include choosing and ranking priorities and resisting political pressures and lobbies. It could also prove difficult, if not impossible to measure returns on investment. There is no guarantee such a structure would make the best economic allocation of the CPP surplus funds.

2. In-House Portfolio Management

A group could be structured internally to invest the CPP surplus funds in the capital markets, or to allocate/auction them for such investment (investment strategy 4). Funds would be earmarked for this purpose. The major drawback here could be the opportunity for political tampering in the affairs of private sector corporations through equity ownership. Moreover, substantial political pressures could be expected to arise. For example, lobby groups may work for or against specific investments; opopposition parties may urge purchase of shares of firms in trouble or of new firms starting up in depressed regions.

3. Semi-Independent Government Agency

The Government could create a Crown agency and appoint ministers and bureaucrats to oversee investment of the CPP surplus funds using a combination of strategies 3 and 4. Funds could flow directly to the agency. Difficulties here are similar to those noted for the above two options. Moreover, it may in practice be troublesome defining and separating responsibilities and accountability.

4. Arm's-Length Crown Agency

The Government could create an independent crown agency to invest the surplus CPP funds in the capital market (strategy 4). Funds could flow directly to the agency from the CPP. The agency could operate under broad investment guidelines set out in a memorandum of understanding between the Government and the agency. The Government could choose to see any net earnings re-invested in the market place by the agency or declared as a dividend to the Consolidated Revenue Fund for general purpose or special uses. The agency would be more or less immune from political tampering. No doubt the Government would experience political pressures related to the application of net earnings and other matters.

Combinations of the above structures could be possible; however, they may be hard to rationalize. In our opinion, the best choice would be the arm's-length crown agency.

In reviewing the respective merits and operations of investment management structures, the experience of existing institutions such as OMERS should be drawn upon. The large

sums involved suggest that initially only the growth in the Ontario share of the CPP fund would be redirected to the market. As experience was gained, maturing Government debt to the CPP could be invested in the private market so that, by the year 2008 or thereabouts all of the Ontario share of the CPP investment fund would be in the capital market. Analysis of potential capital market impacts by Todd and Bossons suggests there are no adverse effects of flowing the Ontario portion of the CPP Fund in this way. (1)

FEDERAL-PROVINCIAL IMPLICATIONS

Under present legislation the provinces--and presumably the federal government--are allowed to use for any purpose the CPP funds which they borrow, provided they guarantee repayment of the principal and interest. It is not clear whether the original designers envisaged provinces taking the funds and then re-investing them. In any event there is no prohibition against this.

Ontario is entitled to borrow more than one half the CPP surplus because of the province's relatively large shares of the combined employment and earnings of the participating provinces. Changes in Ontario's approach to accessing and

investing CPP surplus funds would be of interest to other provinces and the federal government. Interest would be greatest, of course, if Ontario proposed changes in investment strategy for all CPP participating governments, for example the investment of the CPP surplus allotments for all provinces in the private capital markets. Such a proposal might not be well received by those provinces--and there are some--which feel disadvantaged relatively when it comes to capital market access.

If Ontario decides to pursue any of the go-it-alone options presented in this study there are no obvious federal-provincial barriers of which we are aware. Ironically, if difficulties were to arise they would probably do so in the case of the status quo. The status-quo would see Ontario using debt management criteria to determine its draw on its CPP allotment, in which case the Province's borrowings would fluctuate according to capital market conditions.

In the event future economic and fiscal conditions were such that, as in the 1986-87 fiscal year, Ontario turned down the CPP borrowing option either totally or substantially for a number of successive years, a number of things could happen:

(i) the federal government, if it decided the CPP debt was too expensive, could request a change in the repayment terms;

(ii) the federal government could attempt to gain political points by proposing (or simply implementing with respect to its share) alternative investment strategies for the CPP surplus e.g. regional development, small business promotion, and energy projects; and,

(iii) those provinces with lower credit ratings, higher borrowing costs, limited debt-carrying ability and perhaps less ready access to the credit markets could demand a review of the investment options and a greater than proportionate share of CPP funds for themselves.

There would also be implications arising out of a decision to re-lend Ontario CPP funds to other provinces, or to Ontario local governments. Does the Government of Ontario want to put itself in the position where other provinces could become indebted to Ontario? Would such a development compromise in any way negotiation of future fiscal arrangements? Would an offer to re-lend CPP funds to other provinces be misconstrued by some as an Ontario "handout"? How would Ontario deal with the situation of a province or municipality which could not meet its repayment obligations? Could the Government of Ontario lend to, say. Newfoundland, yet turn down Windsor?

PUBLIC PERCEPTIONS

The evaluation of public perceptions of the Canada Pension Plan and its investment fund is important to the consideration of options. However, such evaluation was not part of our mandate. Our research suggests there is a danger that current arrangements are not clearly understood and that changes in them could be easily misconstrued. We offer the following brief observations for consideration:

- If the Government decides not to take all available CPP funds it may be accused of not taking "what is ours" and being incapable of seeing opportunities for investment in the province. Various lobby groups will have lots of suggestions.

- If the Government decides to implement new arrangements to invest the funds it should take great care to communicate the rationale and expected impacts.

- Arms-length investment in the capital market may be the least difficult option politically, the most defensible from an economic standpoint and the most acceptable publicly.

- Investment of CPP funds abroad may raise difficult political questions, even though from a portfolio diversification and fund security viewpoint such investment is clearly defensible.

- Public views may differ on both the purpose and application of the spread between the cost of borrowing from the CPP and the investment earnings.

CANADA PENSION PLAN FUND INVESTMENT OPTIONS AND IMPLICATIONS

I. PUBLIC POLICY BACKGROUND TO THE CANADA PENSION PLAN

An appreciation of the history of the Canada Pension Plan is needed to understand its public policy background and the relevance of this to CPP Fund investment options and implications.

The legislation establishing the CPP has the following preamble:

> "An Act to establish a comprehensive program of old age pensions and supplementary benefits in Canada payable to and in respect of contributors."[2]

The Old Age Security Act preamble reads simply:

> "An Act to provide for Old Age Security." [3]

RETIREMENT INCOME CORNERSTONE

The CPP and OAS are the cornerstone in Canada's retirement income system. Together, they replace up to 40 per cent and 55 per cent of average pre-retirement incomes for retired singles and couples, respectively.[4] Income supple-

ments, including the Guaranteed Income Supplement and the Ontario counterpart, GAINS, as well as employment pensions and individual savings complete the system.

The basic parameters of the CPP, as with OAS, are set by public policy. Changes to CPP investment policy are bound to be of interest and concern to the public.

BRIEF HISTORY OF THE CANADA PENSION PLAN

The Canada Pension Plan grew out of the movement for social reform following World War II. The first steps in public pensions for Canada had been taken earlier with the introduction in 1927 of a means-tested Old Age Pension. This program was superseded by the universal, flat rate OAS in 1951.

National Debate

Debate on the merits of an earnings-related national pension plan with survivor and disability benefits began in 1962. The federal government sought the agreement of the provinces to amend the British North America Act to permit federal payments of survivor and disability benefits. Also in that

year, Ontario presented draft pensions legislation for a provincially-portable, mandatory private pension system with minimum benefits and conditions. A federal-provincial committee was established to reconcile the federal White Paper proposals and the approach advocated by Ontario.

Contributory pensions were a prominent issue in the 1963 federal election campaign and prompted a federal White Paper in July of that year. The main principles of the federal public pensions approach were:

> "...a scheme ... comprehensive so that it applies to the widest possible group of Canadians, and it must be as inexpensive as possible while returning an adequate pension to the individual. It must be truly portable.:."[5]

The federal plan called for a compulsory national plan with broad coverage of the work force, funded on a pay-as-you-go basis by contributions of 2 per cent of earnings. Quebec supported a public plan, but with higher contributions and partially funded. In 1964, Quebec produced its own proposals for pension reform.[6]

Subsequent federal-provincial negotiations in 1965 produced the basic shape of the CPP/QPP we see today, including a 3.6% contribution rate and a partially funded plan in which surplus funds are loaned to the provinces. The first contributions were made in January, 1966 and the first benefits flowed in 1967.

Important Observations

Several important points should be raised now. First, provincial access to CPP/QPP surplus funds was the price that Ottawa paid for a standard national plan. CPP negotiations were conducted against a backdrop of federal-provincial arguments over program jurisdiction and the sharing of fiscal resources.

Second, the provinces were facing growing demands for economic and social capital infrastructure such as highways, hospitals and schools. They saw a pension plan surplus as a source of captive funds. Moreover, some provinces believed they did not have equality of access to the capital markets with the richer provinces, such as Ontario. Thus, they wished to ensure that, insofar as possible, CPP outflows from their regions in the form of the payroll tax were balanced by CPP inflows in the form of pension benefits and borrowing from the Fund.

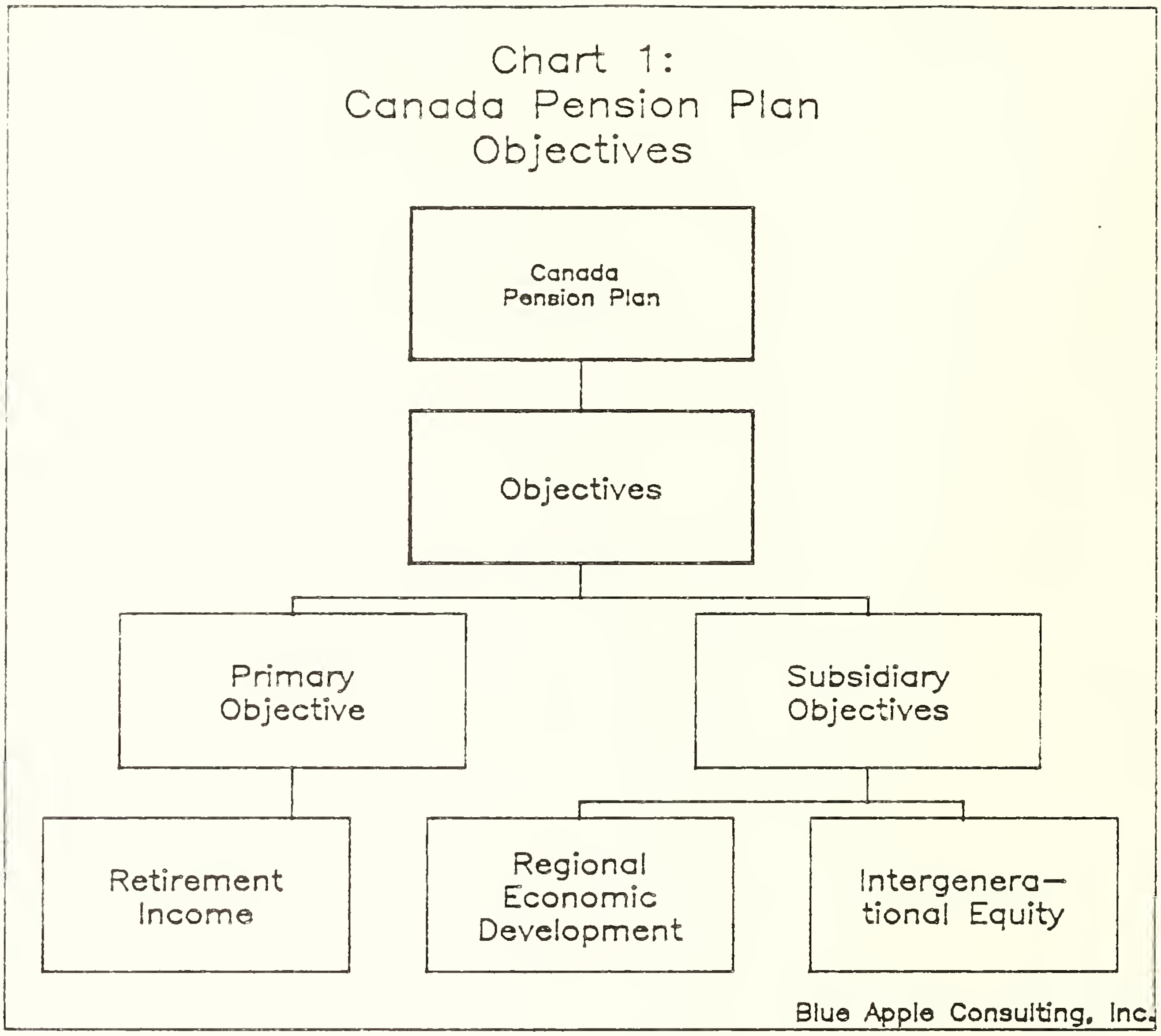
Third, there was no explicit requirement that provincial borrowings from the Fund would ever be repaid, in the sense that maturing debt could be automatically rolled-over and the level of debt need never decline.

Fourth, the allocation of surplus funds to the provinces appeared to carry with it a responsibility to invest the funds in capital projects, but there was no formal requirement to do so.

Fifth, it was recognized by the original designers that future review of funding and contribution rates would be required. The first such review was concluded in 1985-86.(7)

OBJECTIVES OF THE CPP

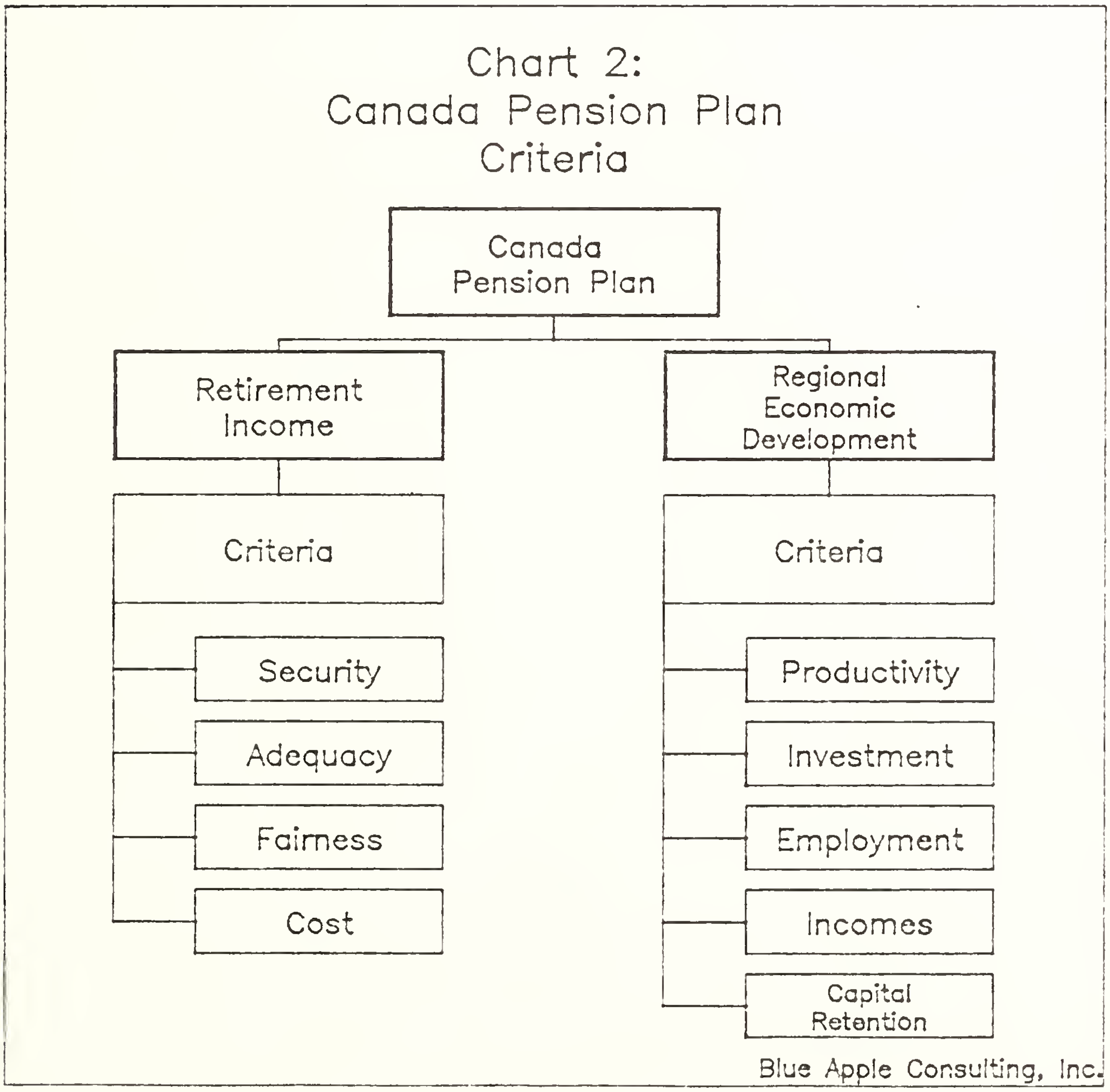
Chart 1 shows in schematic form the objectives of the Canada Pension Plan. The provision of retirement income was, and remains, the primary objective of the plan. The subsidiary objectives were regional economic development and to a lesser degree intergenerational equity.(8)



KEY CRITERIA

Chart 2 illustrates the criteria which lie behind the pension promise, namely that benefits should be adequate and secure, and that the plan should be fair and cost effective. The chart also identifies the criteria which we presume lie behind the regional economic development objective, the purpose of development being to raise productivity, boost investment, create jobs and incomes, and recycle surplus CPP funds back to the regions from which they originated. It

should be noted that in the 1950s and 1960s, the international capital market was still evolving and Canada's domestic supplies of capital to meet escalating private and public sector needs were insufficient. The CPP Fund increased the flow of investment capital, thus supporting the borrowing requirements of the provinces when their access to private capital was limited.



THE CANADA PENSION FUNDING DEBATE

It is significant that the original federal CPP proposals did not include any requirement for a reserve fund. The federal view was that an investment fund was irrelevant to the security of the plan. In the pension reform debate which ran from the mid-70s to mid-80s, the funding of the CPP was a major public policy issue. The popular media raised the specter of a bankrupt CPP and the economic, capital market and intergenerational implications of various funding approaches and fund sizes were subject to wide public discussion.(9)

Pay-go vs. Full Funding

Advocates for a fully-funded CPP argued that a pay-as-you-go plan reduced saving, investment and economic growth and caused substantial and unwarranted intergenerational subsidies. The Ontario Royal Commission on the Status of Pensions in Ontario reviewed in some detail the various funding options and the evidence.(10) The Commission concluded that the CPP was not going bankrupt and that full funding was not only unnecessary and politically unacceptable, but also potentially a weapon for the concen-

tration of economic control and cause of disruption in the capital markets. A fear of government control over massive flows of pension capital was voiced also by the private sector.(11)

The Royal Commission doubted the wisdom of having created partial funding in the first place:

> "The Commission accepts the position that it is appropriate for a contributory social security retirement income plan to be on a pay-as-you-go basis."(12)

The Commission recommended that the fund should be ultimately maintained only for the purpose of securing two years of benefits three years in advance, and not be a source of funds for the provinces. Unfortunately, while the Commission saw a contingency role for the CPP fund, it did not appear to examine the nature of the contingencies to be insured against or consider whether or not the investment strategy it recommended was appropriate for contingency purposes--a surprising oversight.

Modest Partial Funding Endorsed

By 1986, federal-provincial negotiations produced a new public policy framework for the Canada Pension Plan which changed contributions, benefits and funding arrangements. In terms of this paper, the most significant changes are:

- the present 3.6% contribution rate is to be increased on a twenty five year schedule--0.2% per annum from 1987 to 1991, and by 0.15% annually from 1992 to 2011, reaching 7.6% in 2011;

- every five years a federal-provincial review is to be conducted to confirm or revise the contribution rates for the remaining twenty years in the schedule and set new rates for the five years added to the end of the schedule;

- a formula is put in place such that, in the absence of federal-provincial agreement at any quinquennial review, the rate schedule would be extended for five years so that if these rates had been in effect for a period of fifteen years the fund at the end of the fifteen year period would be equal to twice the expenditures in the following year.

Extended over the very long term, these changes produce a CPP investment fund which grows in nominal dollars, but shrinks in relation to expenditures until it stabilizes around the 2:1 target fund/expenditure ratio.

CONCLUSION

This chapter has discussed the public policy background which shaped the Canada Pension Plan and created the CPP investment fund. While the provinces--and the federal government as the residual borrower--have retained exclusive borrowing privileges, the ultimate objectives of investment of the CPP Fund remain vague and are in need of more precise definition.

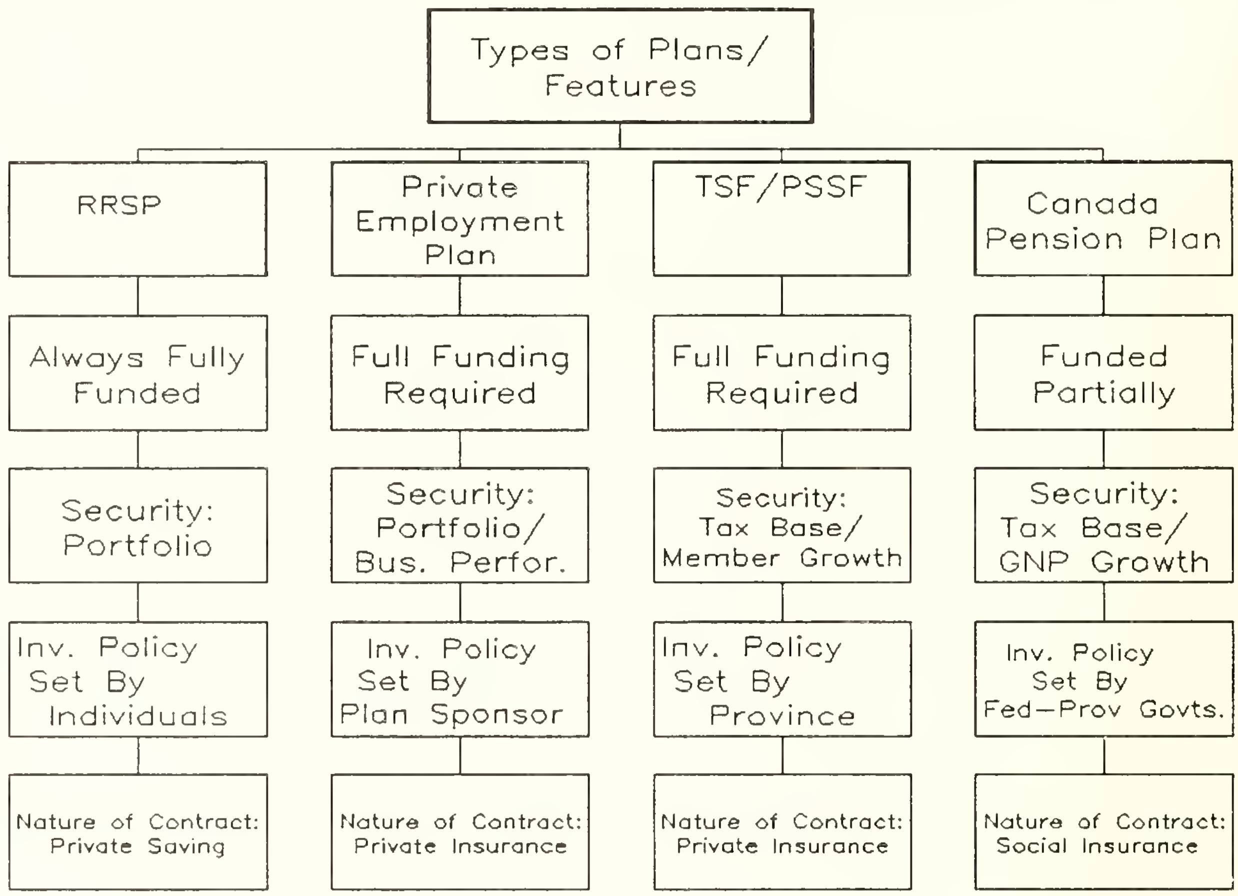
II. THE NATURE OF THE CANADA PENSION PLAN

Consideration of the investment objectives, strategies and management structures for the CPP Fund must include an examination of its fundamental nature and purpose of the CPP itself. First and foremost, the Canada Pension Plan is a mechanism for providing income after retirement. In this regard it is the same as other pension plans. However, it also has unique features, as evident in the following comparison of four different types of pension arrangements.

COMPARISON WITH OTHER PENSION ARRANGEMENTS

To help distinguish the essential character of the CPP, Chart 3 compares a number of features of four different types of pension arrangements: the Self-administered Registered Retirement Savings Plan (RRSP); a private sector employer-sponsored contributory plan with defined benefits; a public sector employer-sponsored contributory plan with defined benefits; and the Canada Pension Plan. There are a number of types of pension arrangements which could be compared and various criteria upon which to base comparison. We

Chart 3: COMPARATIVE FEATURES OF PUBLIC AND PRIVATE PENSION ARRANGEMENTS



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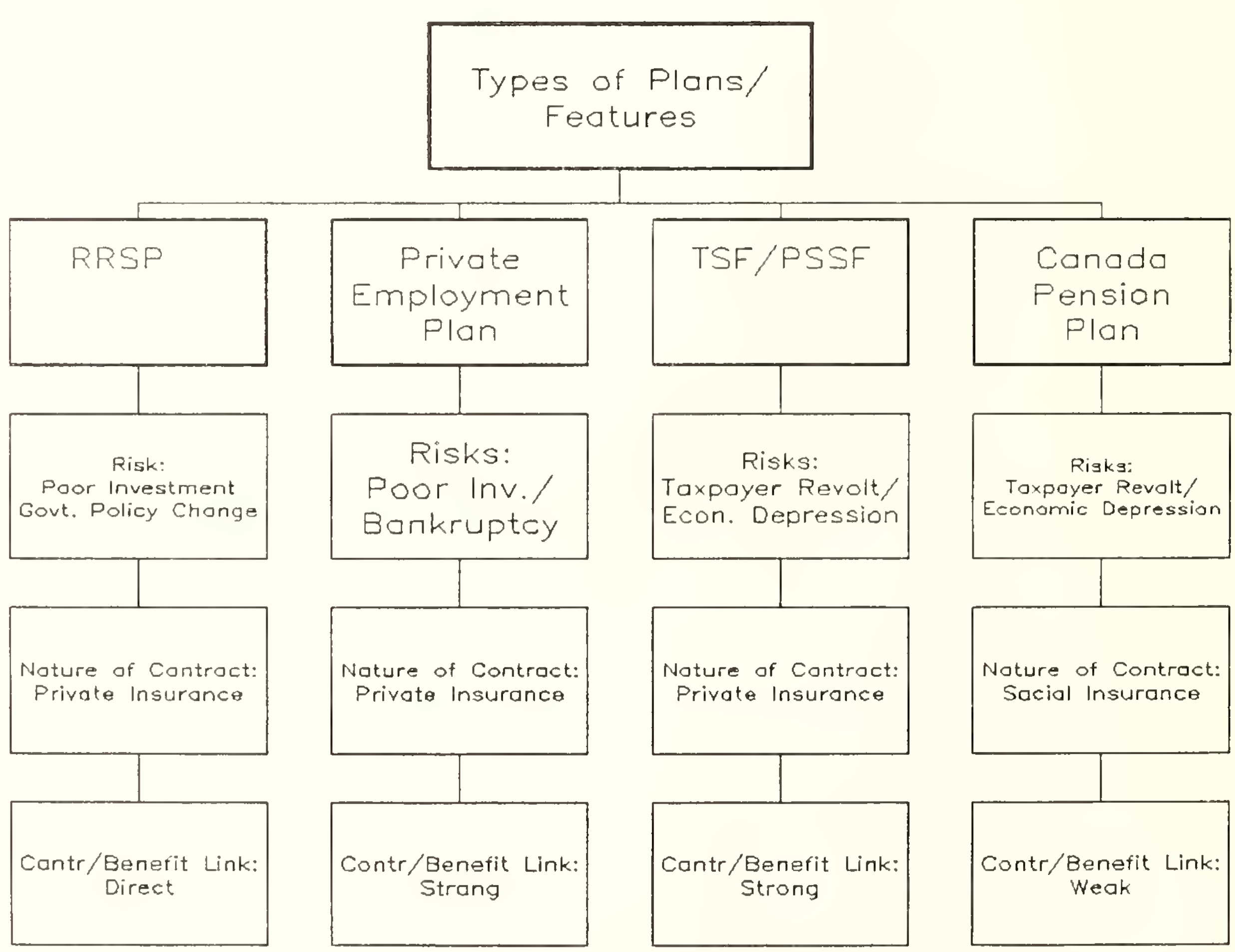

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have chosen those which we feel are most meaningful to the lay person and which are useful in highlighting those features which distinguish the CPP.

<u>The Registered Retirement Savings Plan.</u>

The self-administered RRSP is an example of a money purchase plan in which there is an unequivocal tie of benefits to contributions. An RRSP is always funded fully: there are no surpluses or deficits, regardless of when the funds are required. The value of the pension depends directly upon the accumulated asset value of the plan, as also does security of the pension. The pension deal is therefore asset related. The pension decision is made by the individual who voluntarily sets up the RRSP, although government taxation benefits exert a substantial and encouraging influence. To take advantage of tax benefits, the individual must arrange for a trustee to register and managed his or her plan. The individual opts to sacrifice current consumption and increase saving to ensure an income stream beyond retirement.[13] The trustee is responsible for ensuring the RRSP assets are available when required, but not for the value of the assets as such.

In the self-administered RRSP, there is no pooling of capital market risk unless the funds are invested specifically to achieve this e.g. in mutual funds. The risks to the individual are primarily the conventional market risks; however, there is an implicit risk that future government policy changes will affect the value of the pension, both in terms of its build-up of value pre-retirement and its capacity to replace income, post retirement.

The Employer-Sponsored Pension Plan.

Of the employer-sponsored pension plans, those with defined benefits are the most common. The establishment of employer-sponsored plans, as the name suggests, is voluntary for employers, just as RRSPs are voluntary for the individual. However, once established they become compulsory for employees in terms of membership and contributions (for contributory plans), in most cases. Pension policy for contributory plans may be determined by collective bargaining. The plans are group financial arrangements to provide retirement income. The vast majority of employer-sponsored plans in the public sector are contributory, whereas in the private sector less than one-half are contributory. There is a close relationship between contributions and benefits and both are linked

directly to earnings. In so far as the nature of the pension deal is concerned, benefits of employer-sponsored plans may be viewed as a reward for long service, as a deferred wage, or on some other basis.

A separate study for the Task Force deals in some depth with the evolution of the pension deal and its consequences for pension policy, for example the ownership and control of pension surpluses.(14)

While risks are pooled in employer-sponsored plans they are by no means eliminated. Pension promises and their costs reflect actuarial assumptions about mortality trends, the growth of the business--employment and payroll--and the future performance of the capital markets, interest rates and inflation. Fund deficits can develop which have to be addressed. Actuarial projections for private sector plans are done on a "going-concern" basis and employers are liable to make up deficiencies. Private companies may go out of business, however, and if the pension assets were held by the employer in the normal course of business they might not be secure. Accordingly, the plans must be managed at arm's-length by a trustee and registered to obtain preferential tax treatment.

Public-Employee Pension Plans

Members of public-employee pension plans sponsored by government as employer also run risks which could affect the pension promise, for example taxpayers may revolt against rising costs of pensions and economic and fiscal instability could reduce the ability of government to meet its full liability.

Funding requirements for plans sponsored by the Government of Ontario are governed by the same laws that apply to private sector plans.[15] The pension promise is similarly liability-based with the Government liable to make good on the promise.[16]

The Canada Pension Plan.

The Canada Pension Plan is a mandatory and contributory plan. [17] As in the case with employer-sponsored plans, CPP contributions and benefits are related to earnings. CPP policy is established by federal-provincial negotiations, whereas collective bargaining determines the shape of many employer-sponsored plans. Since the CPP has only a modest

level of funding, liability for the pension promise rests with the two levels of government which operate under the assumption that economic growth and wealth creation will generate the wherewithal.

In contrast to the RRSP and contributory employer-sponsored defined benefit plans, the CPP has only a weak link of contributions to benefits, despite appearance to the contrary. This point deserves elaboration.

CPP SUBSIDIES

It is true that the CPP pension to which the individual is entitled is related to contributions and earnings by means of a formula. It is also the case that, in the aggregate, benefits and administrative costs are covered by contributions and interest earnings and that the Plan is virtually pay-go financed. However, the reality is that no existing CPP pension recipients have paid in full for their pension entitlements in the way that recipients of employment pension plans pay for their benefits through their own and/or employer's contributions for their eventual pension.(18) CPP contribution rates have been, and still are currently, well below the full cost of the pension promise.

Actuarial projections form the basis of long-range planning for the CPP as they do for other pension plans. In 1985, the CPP had an estimated unfunded actuarial liability in the range of $280-$295 billion, as discussed in Appendix A. To finance future pension promises, contribution rates are scheduled to rise from the present combined employee-employer 3.8 per cent of earnings to 5.95 per cent by the year 2000, and peak at 11.68 per cent in the year 2050.

There is no certainty these contribution rates will be actually imposed. Even assuming funding balance in the aggregate and over the long term, the yearly basic exemption, maximum pensionable earnings, drop-out provisions and other features of the Plan mean that subsidies will continue to flow, thus distorting the link between benefits and contributions. Even when the CPP is mature, subsidies will exist reflecting social policy goals.(19)

OAS/GIS PAYMENTS

Another point of contrast is with the OAS/GIS payments, which like the CPP are universal in scope. OAS/GIS payments are transfers available to all qualifying elderly Canadians.

Payments bear no direct relationship to the personal economic contributions made or taxes paid by individuals over their working lives. Benefits are at the discretion of the federal government and their security depends on the ability of Ottawa to tax and the willingness of taxpayers to foot the bill. These transfer payment liabilities are not subject to the long-term planning typical of pensions arrangements.

OAS/GIS are not insurance payments. Individuals make no direct contributions. The state takes on the liability to pay, but the promise is not backed by any ear-marked assets. The nation's wealth underlies the security of these transfer payments.

THE CPP 'PROMISE'

It is interesting to speculate on the intrinsic nature of the CPP "pension deal" e.g. as a gratuity, a right, a deferred wage, reward-for-long-service or simply retirement income security.

There are four components to the build-up of pension: (i) the employee contribution; (ii) the employer contribution; (iii) the government subsidy (through tax write-offs and benefit subsidies); and, (iv) investment earnings. Since the CPP as constructed will never produce an actuarial surplus there is no question of an employer claim on employer contributions. Moreover, the employer contribution is a tax deductible business expense and it is made to the account of the individual employee. By contrast, the individual has a direct claim by virtue of the employee and employer combined contribution and the promise of the state to pay. The part of this claim relating to contributions--employee and employer--and to investment earnings could be construed as deferred wages. The part of the claim flowing from government subsidy could have the character of a reward-for-long-service, but service to the nation rather than to any employer.

CONCLUSION

To conclude this section, the Canada Pension Plan is different in several important respects from private and public pensions arrangements. These differences reflect its character as a mandatory, national plan, financed by a payroll tax on an essentially pay-as-you-go basis.

III. CANADA PENSION PLAN FINANCES: TRENDS AND PROJECTIONS

Projections for the Canada Pension Plan are provided by the Department of Insurance, Canada, and performance data by National Health and Welfare, Canada, according to the requirement of CPP legislation.[20]

PAST PERFORMANCE

The Canada Pension Plan has grown rapidly since its inception in 1965. Contributions rose from $94.9 million in 1965-66 to $4.5 billion in 1985-86. Over the same period, total benefits increased from zero to $4.9 billion, and administrative expenses from $5.5 million to $111.2 million. Investment income increased from zero in 1965-66 to $3.0 billion in 1985-86. The CPP investment fund, which totaled $89.4 million in 1965-66 stood at $31.7 billion in 1985-86. As depicted in Chart 4, the CPP ran a surplus of contributions over benefits and costs every year until 1983; this surplus plus investment earnings produced the steadily rising Fund shown in Chart 5.

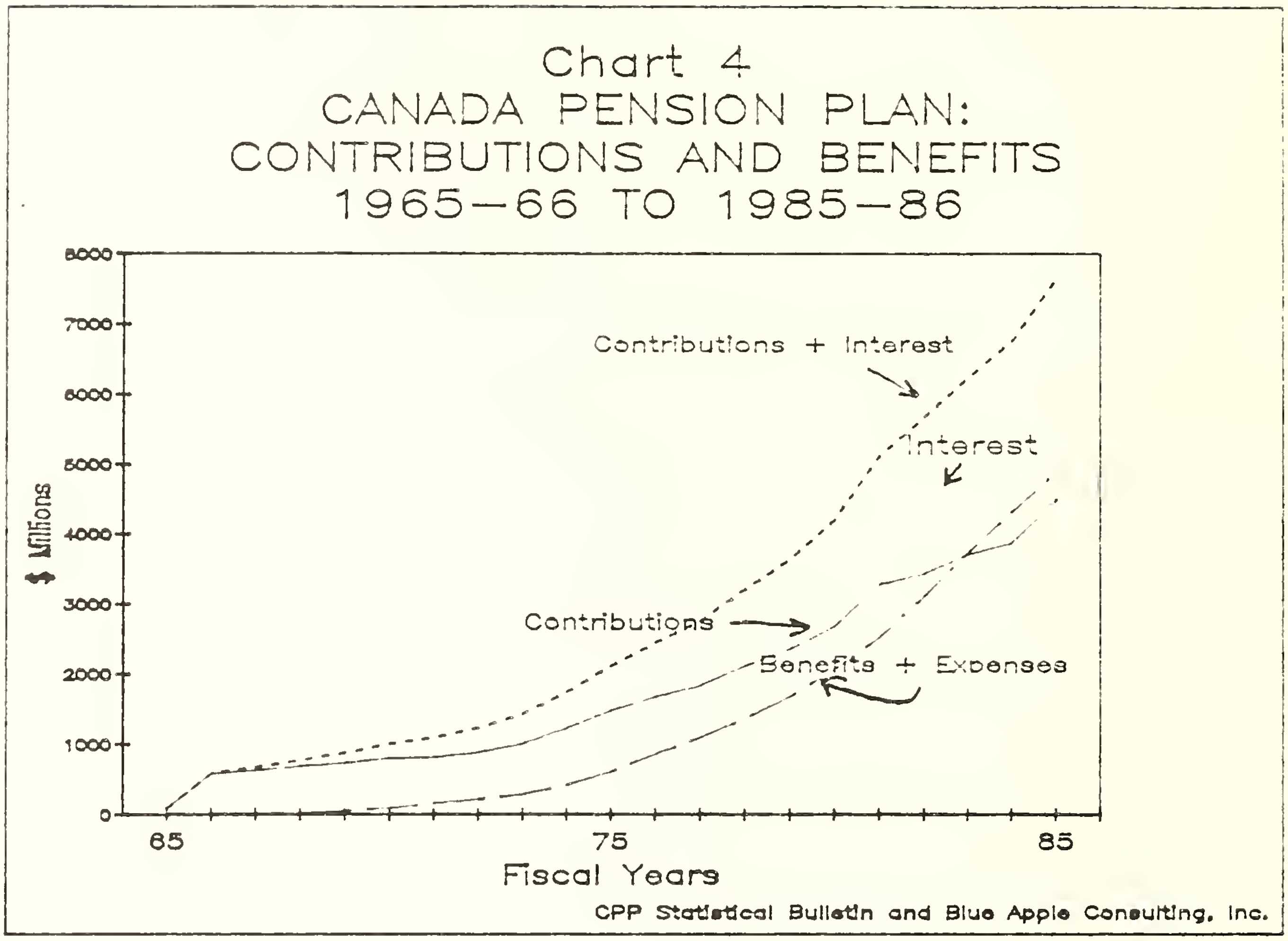


Chart 4
CANADA PENSION PLAN:
CONTRIBUTIONS AND BENEFITS
1965-66 TO 1985-86
$ Millions
Contributions + Interest
Interest
Contributions
Benefits + Expenses
Fiscal Years
CPP Statistical Bulletin and Blue Apple Consulting, Inc.

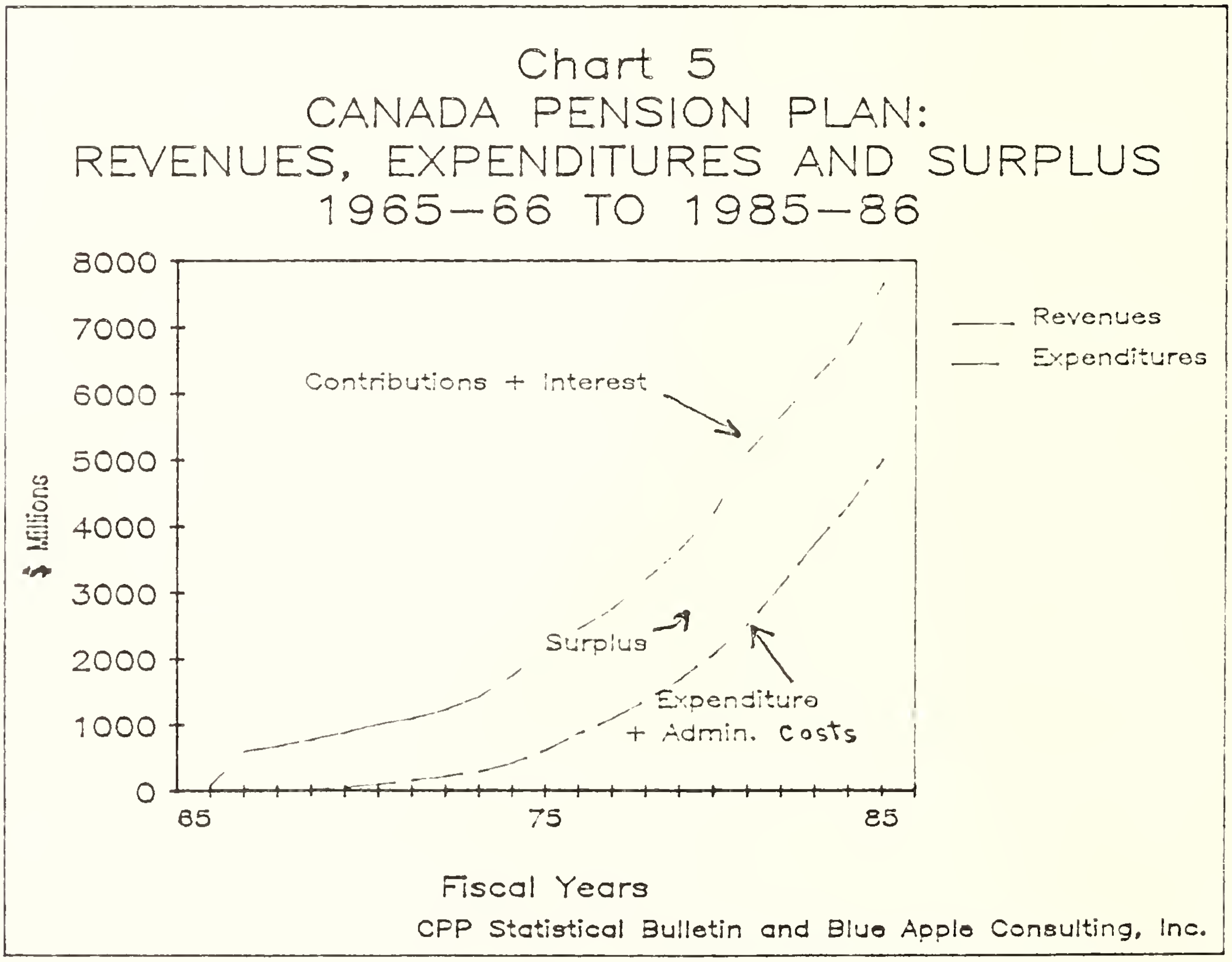
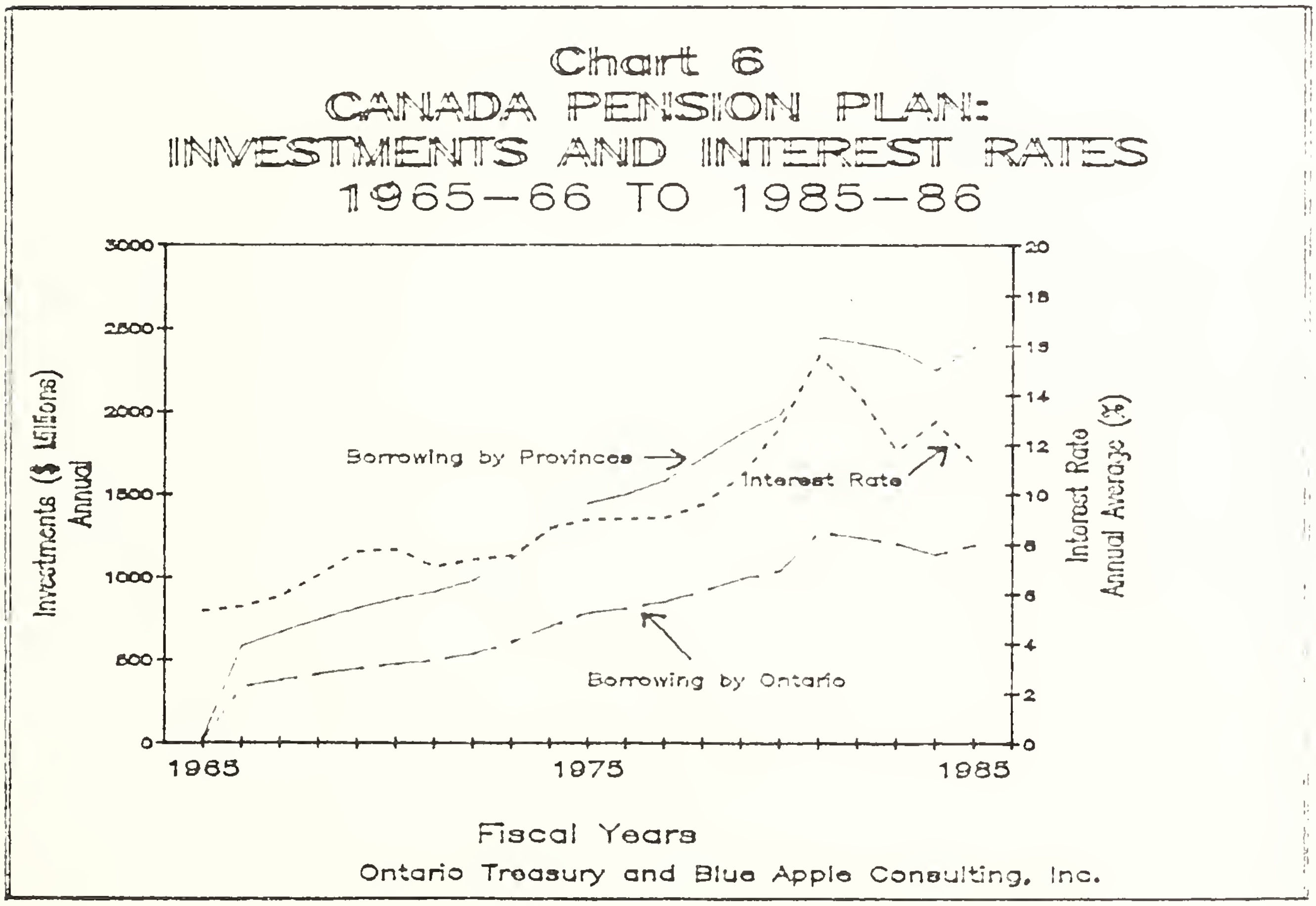


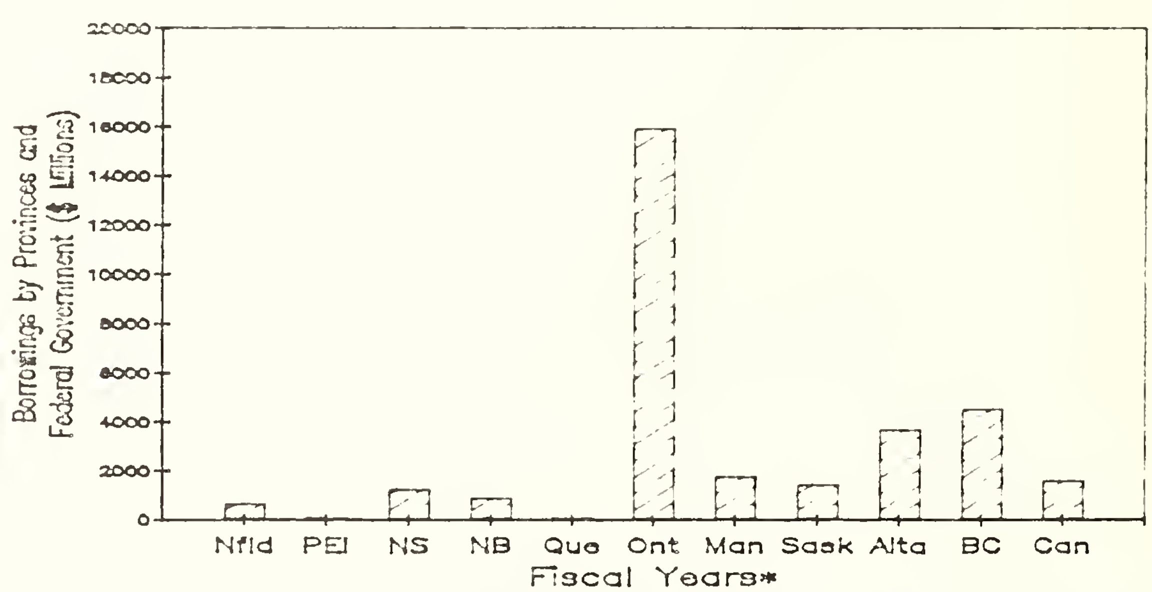
Chart 5
CANADA PENSION PLAN:
REVENUES, EXPENDITURES AND SURPLUS
1965-66 TO 1985-86
$ Millions
Revenues
Expenditures
Contributions + Interest
Surplus
Expenditure
+ Admin. Costs
Fiscal Years
CPP Statistical Bulletin and Blue Apple Consulting, Inc.

Of the $29.9 billion cumulative provincial borrowing from the CPP by the end of 1985-86, Ontario had borrowed $15.8 billion, or 52.8 per cent of the total. Chart 6 shows the trend in total borrowings by the provinces, including Ontario, as well as the average annual interest rates which were applied. The CPP fund benefited from an upward trend in interest rates, as CPP rates followed the rallying path of benchmark long-term outstanding federal bonds in the capital markets.(21)



There has been a sharp change in borrowing practices over the past two years. In 1985-86 and in 1986-87, some provinces, including Ontario in 1986-87, declined to take up all available CPP funds. In consequence, the federal government, as the residual borrower has now become a significant drawer of CPP funds. At December 31, 1986, Ottawa had issued $1.6 billion in bonds to the CPP, $1.4 billion of which were issues over the past two fiscal years. In just two short years, Ottawa's CPP commitment has exceeded that accumulated since 1965 by any of the Atlantic provinces. The accumulated CPP debt of the various governments is shown in Chart 7.

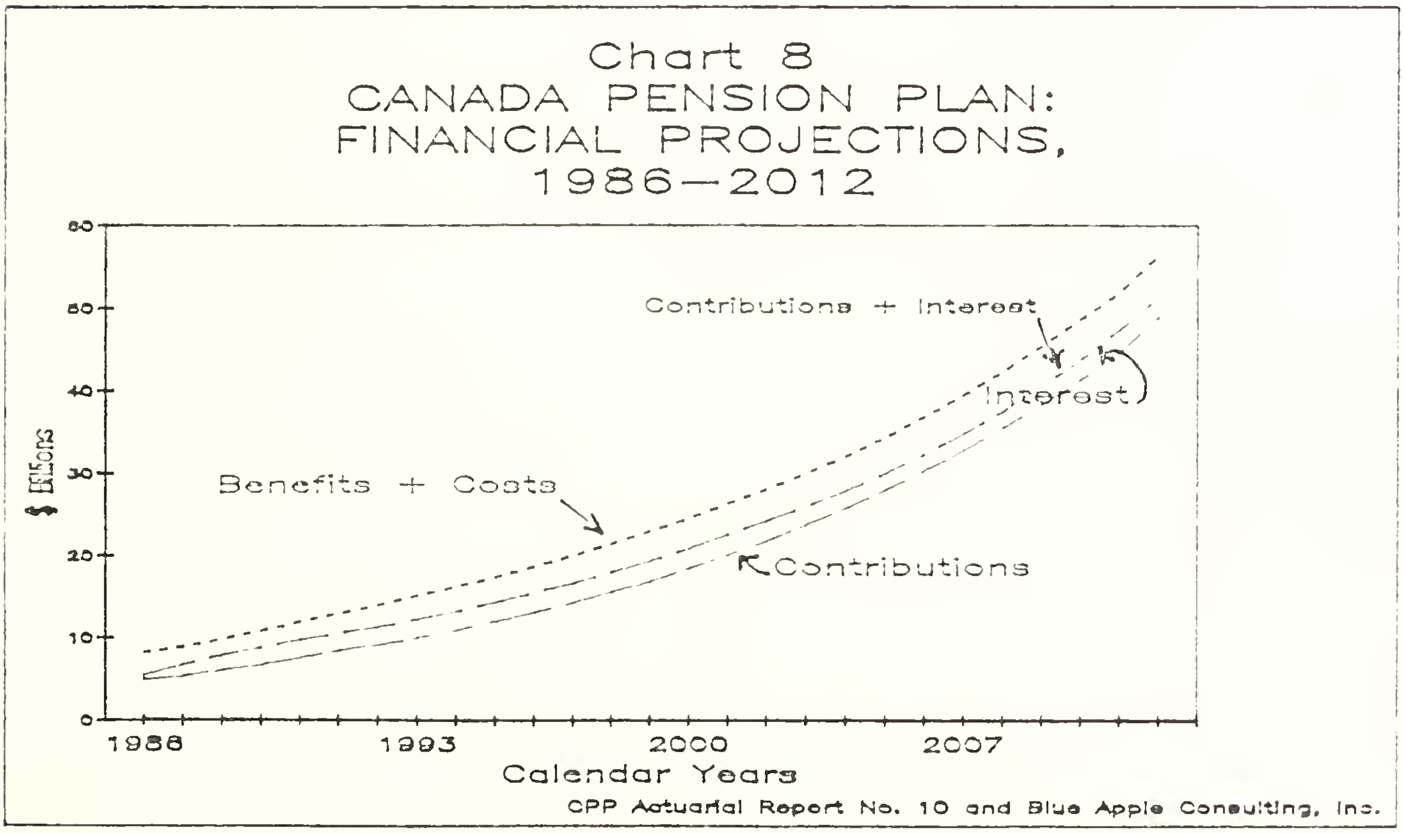
Chart 7
CANADA PENSION PLAN:
DISTRIBUTION OF INVESTMENTS BY BORROWER
1965–66 TO 1986–87



* 1986–87 to Dec. 31 only
CPP Statistical Bulletin and Blue Apple Consulting, Inc.

FINANCIAL PROJECTIONS

Chart 8 traces CPP financial projections out to the year 2012, or 25 years from now. In contrast to the period up to 1983, benefits and costs are projected to exceed contributions in every year, and a portion of interest earnings on the CPP investment fund will be required to pay pension benefits. Nevertheless, the CPP investment fund will still grow to $127.7 billion by 2012. Beyond this horizon, fund values are so large they are best judged relative to the requirement to pay benefits. While the Fund totals $1.006 trillion by the year 2050 and $16.145 trillion by the year 2100, the ratio of Fund to annual expenditures holds around 2.0 over this very long period.



The prescribed long-range target ratio is less than one-half the 4.58 value projected for 1987. Over the next 25 years the ratio falls progressively to the target range. This trend is revealing. It tells us that the funding basis of the CPP shifts from at best weak "partial funding" to paygo funding with a two-year contingency reserve. From this shift in funding policy it is evident that in reforming CPP financing, political leaders have rejected firmly both the high-funding options and access by the state to massive and "captive" amounts of debt financing.

Nevertheless, some provinces are insistent that the growing CPP surplus not be invested in the capital market, principally because they believe the funds support essential public spending and fear that if funds flowed to the private market they would be channeled to Central Canada or abroad.(22) Provinces with lower credit ratings could be forced to raise substitute funds in the capital markets on less favourable terms and conditions.

SENSITIVITY ANALYSIS

The contribution rate increases projected in the recent CPP amendments are the minimum required to ensure the CPP can pay promised benefits over the long haul and sustain a contingency reserve. Under the new funding formula, the reserve is targeted as a relatively constant percentage of fund expenditures. Higher investment earnings would not make the fund bigger and make more secure the pension promise. Instead, higher investment earnings would be used either to reduce contributions or to increase benefits.

Sensitivity analysis conducted for us by the Department of Insurance shows that the impact of higher (or lower) rates of return on contributions/benefits are likely to be modest as the target fund/earnings ratio produces a fund which is small relative to either total contributions or benefits. For example, the accompanying Table shows that if the interest rate is higher than in the base case by 2 percentage points, there is only a relatively small drop in contributions and contribution rates. By the year 2100, the contribution rate applied to contributory earnings would be 0.36% lower than in the base case. The investment fund is

higher by $354 million, an increase of only 2.2%, and this only because in the analysis the fund ratio is allowed to rise from 1.98 in the base case to 2.04. If the interest rate were 1% lower than in the base case, even more modest changes occur in the reverse direction.(23)

If interest rates, earnings and inflation are all higher than assumed in the base case the impact on fund performance can be dramatic, at least when measured in nominal dollars. For example, in the situation where earnings, the interest rate and the rate of inflation are 3.0%, 2.5% and 2.5% higher, respectively, than in the base case, the investment fund accumulates to $314 trillion by the year 2100, yet still is the equivalent of only 2 years of expenditures.

FUND INVESTMENT PERFORMANCE

The rate of interest earned on CPP Fund investments is the weighted-average yield to maturity on federal bonds outstanding with more than 20 years to maturity. The average annual rate earned rose steadily from 5.29 per cent in 1965-66 to 15.56 per cent in 1981-82, and has since been on a declining trend, reaching 9.55 per cent in 1986-87. The market prices

SENSITIVITY OF CPP PROJECTIONS TO CHANGES IN ASSUMPTIONS

	1987	2000	2050	2100
Base Projection: [1]				
Contri. (rate)	3.80	5.95	11.68	11.40
Contri. ($ b)	5.4	18.6	538.0	7,594.0
Benefits ($ b)	6.8	21.0	523.9	7,659.4
Fund ($ b)	36.0	74.0	1,066.0	16,144.9
Fund ratio	4.58	3.26	1.91	1.98
Interest Rate 1% Lower:				
Contri.(rate)	3.80	5.95	11.47	11.15
Contri. ($ b)	5.4	18.6	528.3	7,427.4
Benefits ($ b)	6.8	21.0	529.3	7,659.4
Fund ($ b)	36.1	79.5	1,058.5	16,036.4
Fund ratio	4.59	3.51	1.89	1.98
Interest Rate 2% Higher:				
Contri. (rate)	3.80	5.95	11.26	11.04
Contri. ($ b)	5.4	18.6	518.6	7,354.1
Benefits ($ b)	6.8	21.0	529.3	7,659.4
Fund ($ b)	36.1	85.6	1,018.5	16,502.8
Fund ratio	4.59	3.78	1.82	2.04
Interest, Earnings and Inflation Higher:				
Contri. (rate)	3.8	5.95	10.77	10.60
Contri. ($ b)	5.4	22.9	2,494.6	145,239.4
Benefits ($ b)	6.8	24.6	2,443.4	144,931.2
Fund ($ b)	36.0	80.8	5,121.7	313,988.6
Fund ratio	4.58	2.97	1.93	1.98
Lower Fertility:				
Contr. (rate)	3.8	5.95	12.89	13.19
Contri. ($ b)	5.4	18.6	528.1	6,238.5
Benefits ($ b)	6.8	21.0	523.1	6,307.1
Fund ($ b)	36.0	74.0	1,064.2	13,607.6
Fund ratio	4.58	3.27	1.93	2.04

Source: Department of Insurance.

of long-term bonds are most susceptible to price inflation; thus it is no surprise to find that earnings of the CPP Fund have by and large tracked inflation trends over two decades. Since the CPP Fund has been invested exclusively in government bonds, two performance questions arises: (i) how does the rate of return earned compare with alternative investments? and, (ii) could the Fund have earned more with a different investment strategy?

Comparative Investment Performance

As shown in the table below, the average annual rate of return on the CPP Fund is estimated at 6.73, 11.77 and 16.90 per cent over the last twenty, ten and five year periods, respectively. Over the twenty year period, higher average yields were earned by alternative investments in stocks, mortgages, short-term corporate paper and weighted long-term bonds (in the case of bonds, federal bonds are prime security and out-performed bonds in general). Over the most recent ten-year period, the CPP Fund portfolio was again out-performed by stocks and mortgages; however, short-term corporate paper and weighted long-term bonds returned approximately the same average return as did the CPP Fund portfolio.

During the past five years, the "great bond rally" boosted the return on the CPP Fund to 16.90 per cent, out-pacing returns on stocks and short-term corporate paper, equalling those earned by mortgages, but falling short of the 22.29 per cent earned by weighted long bonds.

Comparison of investment returns from alternative portfolio investments is a complicated exercise, particularly for "hypothetical" portfolios of 100 per cent stocks or bonds etc. The above estimates are of the total returns from the beginning to the end of each period for "100 per cent" portfolios, and intra-period interest, dividends and net capital gains are assumed to be fully re-invested. It is important to note that relative investment returns are affected greatly by the periods of comparison and that in practice pension funds would not invest exclusively in one type of asset.

The above data on investment returns suggests strongly that if the Ontario portion of the CPP Fund had been invested in a portfolio representing a cross section of the capital market earnings would have been higher.

Table

RATES OF RETURN ON CPP FUND AND ALTERNATIVE INVESTMENTS

	Average Period Returns %		
	20 Year	10 Year	5 Year
CPP Fund:	9.69	11.72	11.89
Alternatives:			
90-Day Corporate Paper	9.68	11.96	11.48
Mortgages	10.10	12.39	16.63
Weighted Long Term Bonds	9.02	11.73	22.39
TSE 300 Stocks	11.35	16.53	13.72

Source: CPP Fund, Ontario Treasury, preliminary estimates: data for period 1967-85. Alternatives, Mcleod, Young, Weir Limited: data for periods are: Dec. 1966 to Dec. 1986; Dec. 1976 to Dec. 1986; and Dec. 1981 to Dec.1986.

Could the CPP Fund Earn More?

The above analysis suggests that the CPP Fund could earn a a higher return if its portfolio was a mix of assets rather than solely government bonds, and if the portfolio was managed to take advantage of market opportunities. However, it is impossible to calculate with any degree of certainty the potential extra yield. Further analysis of portfolio options and implications are beyond the scope of this study.

CONCLUSION

To conclude this section, the ratio of the fund to expenditures is scheduled to decline in the years ahead to the 2.0 range and be held at this level indefinitely. In the interim, while the fund will increase considerably in nominal dollars under most scenarios it will decline in size relative to the economy. Thus, the current level of the CPP investment fund, measured relative to the economy and the flows of funds through the capital markets, may be assumed to be at its peak. Past performance suggests strongly that earnings would have been higher had the Fund been invested in a balanced portfolio of market instruments. These are important considerations in the context of investment options for the Ontario portion of the CPP Fund.

IV. INVESTMENT OBJECTIVES FOR THE CANADA PENSION PLAN

The Province of Ontario has run budget deficits consistently since the 1970-71 fiscal year. Deficits have to be financed by borrowing. Funds may be borrowed from the private capital markets (public borrowing) and from 'captive' pension funds (non-public borrowing). Ontario has traditionally relied to a considerable degree on non-public borrowing to finance its net cash requirements.

NON-PUBLIC BORROWING

In the 1970s, the main sources of Ontario's non-public borrowings to finance net cash requirements were the Canada Pension Plan, the Teachers' Superannuation Fund (TSF) and the Ontario Municipal Employees' Retirement Fund (OMERS). Substantial growth was expected in all three captive sources of debt capital, out-pacing financing requirements. Thus, beginning in 1975, the Province began the process of placing surplus OMERS funds in the private capital market and by 1979 all OMERS funds were flowing to the market.[24]

It should be noted that the Province also uses the net cash flow of the Public Service Superannuation Fund (PSSF) to finance its expenditure programs; however, no bonds are issued in respect of funds used. In the Government's books, PSSF revenues and expenditures are "non-budgetary transactions". The PSSF net cash flow has the effect of reducing net cash requirements. If the PSSF funds were in the future to be invested in the capital markets, net cash requirements would rise and additional external financing would be required.

The 1978 Ontario Budget examined non-public borrowing and its use in public capital creation. The Budget concluded as follows:

> "... the demand for new public capital has leveled off and an examination of demographic forces suggests that a lower level of demand will prevail in the future. This development presents an opportunity to re-deploy Ontario's non-public sources of funds to other, predominately private sector uses. The OMERS experience demonstrates the practical feasibility of this proposition."[25]

Almost a decade later, the Task Force on the Investment of Public Sector Pension Funds has been given the mandate to explore investment opportunities for the TSF, PSSF, CPP and other Ontario public sector funds. With respect to the Canada Pension Plan, the question arises of the objective(s) of re-deployment of funds. In 1986-87, of the $1.2 billion available to Ontario from the CPP, the Province borrowed $232 million, Ontario Hydro borrowed $119 million, and the remainder was borrowed by the federal government, as required by the CPP Act. The Province retired $333 million of CPP debt, thus reducing its total outstanding debt to the CPP by $101 million. For the current fiscal year, the Province plans to turn down all available CPP funds and to retire $376 million of debt to the CPP.

THE ORIGINAL INVESTMENT OBJECTIVES

The purpose of the CPP Fund is not stated in the CPP legislation. In our earlier discussion of the nature of the Canada Pension Plan we argued that the existence of the investment fund is of little relevance to the security of pensions, and that the Fund owes its existence to the desire

expressed originally by the provinces that a surplus be created and that surplus funds be re-cycled back to the regions from whence they originated for "investment" in economic development by the provinces.

The participating governments presumed that the "social rate of return" from such investments justified both the levying of a payroll tax in excess of the pay-as-you-go rate as well as the subsequent use of the funds by the public sector. Conventional rate of return/risk trade-off analysis was not applied. Viewed in this light, the CPP Fund could be seen as just another tax to support public spending and the issuing of debt little more than a fiction. However, participating governments did choose to create a fund, to borrow from it and to issue legal promises to pay in the form of bonds.

CURRENT INVESTMENT OBJECTIVES

Our research and analysis suggests that during the debate on pension reform over the past several years, four investment objectives for the Fund have, at one time or another been identified, although as we shall see, without careful consideration of the potential conflicts between them or of their full ramifications.

The four objectives are:

- (i) to provide a contingency reserve;
- (ii) to support government borrowing;
- (iii) to promote economic development; and,
- (iv) to maximize the rate of return.

Conflict can obviously arise among these objectives and each raises important questions. For example, which rate of return is implied, the "market" rate or the "social" rate? Who benefits from the fund earnings, CPP beneficiaries or society at large? What is the nature of the contingencies the CPP could face? What is "economic development"?[(26)] What would be the impact of changes in objectives on government financing? Such issues must be addressed in considering the future role of the CPP fund.

THE CPP FUND AS A CONTINGENCY RESERVE

Evidence provided by the structure of the CPP funding formula and our research indicates that a contingency reserve role has been established for the Fund. Three questions arise:

1. What "contingencies" are envisaged?
2. Should insuring against contingencies be a CPP Fund objective?
3. Can the Fund fulfill this role?

In our opinion none of these complex questions have been addressed adequately by researchers, advisors or policymakers and we can do no more than scratch the surface in this study.

The Nature of the Contingencies

Dealing with the first question, the state, unlike a private company, is unlikely to go out of business. Even if this possibility exists, the nation cannot collectively insure itself against such a contingency.[27] Ignoring a situation of war or calamity of nature, the kinds of hazards

faced by the state which might impair its ability or desire to meet CPP pension liabilities are of two kinds--economic and political.

Economic events, such as a depression, could severely reduce the capacity of the economy to produce incomes and wealth and of the state to tax and to borrow. A situation could arise where the pension promise could not be met. Moreover, in such a situation, and indeed in other possible scenarios, a "taxpayers' revolt" could force politicians to reduce pension entitlements. Taxpayer revolt simply on the basis of costs is a possibility which cannot be dismissed. In such circumstances, it is probable that the overall tax burden would be judged as already too high.

On a less dramatic level, for any number of reasons--demographic and economic--the actuarial projections for the CPP may turn out to be overly optimistic, pointing to higher than anticipated contribution rates over a certain period of time.

Should the CPP Fund be Held For Contingencies?

Should the CPP Fund be used to insure against such contingencies? As mentioned, we cannot insure collectively pensions or other public obligations against the demise of the state, the occurrence of war or a calamity of nature. Even in the event of economic depression it is doubtful the Fund would be of much value in protecting pensions. The nation's income and wealth would fall dramatically. The market value of pension fund assets--public and private--would plummet, creating large unfunded actuarial liabilities and a liquidity crisis for pension funds could be precipitated by a sharp drop in contributions. If it were determined that pension fund assets would have to be liquidated in substantial volumes over a short period of time, market participants might drive the price of some assets down further by trying to unload early and beat the market.

One possible future use for the reserve noted by some observers would be to "smooth" contribution rate increases in the event demographic or economic events caused major deviations from projections. However, we question whether the Fund would or could be actually used for this purpose, and in fact precisely what is meant by "smoothing".[28]

Could the CPP Fund by Used to Meet Contingencies?

Could the CPP Fund be used to deal with contingencies? This is not an easy question to answer in part because of its political dimensions, but also because the answer depends on the nature of the contingency and the assets of the Fund.

Such an application of the Fund would only make sense if all participating provinces agreed on this objective and on what would constitute a contingency. Ontario could not pursue this objective alone.

The Fund is, in a sense, already being used to deal with a "contingency". The recent reforms project the Fund to run down to half its size relative to expenditures. This will allow contribution rates to be "eased" upward over the long term at a slower rate than if no fund existed. However, the gap between what contributors pay and the pay-go rate will be highest over the next several years and is projected to shrink to zero by the year 2020. Contributors in the next century will pay contributions at rates two to three times those of today, yet see little or no benefit from running down the Fund ratio.

Thus, this initial use of the Fund for "smoothing" has benefitted most those contributors who are being asked to contribute the least. The rationale for this can only be that a slower rate of increase in contributions over the next several years is required to avoid the "contingency" of negative economic effects and/or political fallout. The fund for such uses in the future will be relatively smaller even though there is the possibility the economic need could be greater.

Presently, the CPP Fund is invested exclusively in non-marketable government bonds. In a time of economic difficulty, government, facing declining revenues and rising demands might be ill-disposed toward repaying CPP debt. On the other hand, the Fund could perform a function as an economic stabilizer, for example, scheduled contribution rate increases could be delayed or rates reduced temporarily to sustain consumer spending, and repayment of CPP debt on short notice could perhaps be justified on such grounds. However, other policy instruments are available and their use would be more appropriate.

In general, we find the "contingency" role to be ill-defined and see considerable difficulties with its adoption and application. Given the serious nature of the events which would have to occur to jeopardize CPP pensions, our ability to insure against major contingencies and indeed the contingency fund objective itself must be called into question. However, if the Fund is given this role, then investment criteria should focus upon security and liquidity of assets rather than maximizing rate of return. The current practice of investing the Fund in non-marketable, fixed-term provincial and federal long bonds with no clear expectation that governments will ever repay the debt would be entirely inappropriate.[(29)] It is not clear what value can be ascribed to the "early call" clause of the CPP Act (Sec. 113c).

As mentioned previously, the CPP Act is silent on the question of the ultimate liability to meet the pension promise. At present, fund assets are comprised totally of government bonds. In a crisis, the repayment of these funds may not be a priority. No Ontarian's CPP entitlement can be said to depend in any significant measure on the CPP investment fund or its performance, as currently constituted.

Maximizing the Rate of Return

Appearances to the contrary, the rate of return on CPP fund investments is in our opinion of little if any consequence to the security or value of the pension promise.

Maximizing the rate of return on the Fund investments does not appear to have been an explicit policy goal at the inception of the CPP. Moreover, the revised funding formula established recently diminishes the importance of the fund in proportion to benefit payments. Higher fund earnings would have little effect on either the contribution rates or pension benefits of Ontarians, with the exception that flexibility to deal with short-term problems would be increased modestly. Even if CPP surplus funds were invested differently and at higher yields, under existing legislation there is no mechanism whereby the extra income could be returned to the Fund. Naturally, this obstacle could be overcome if maximizing the rate of return were to be adopted as a goal and the CPP provinces agreed to pay such yields into the Fund, and anyway not less than the current interest rate formula. This concept has not been explored with the other provinces.

Even in the absence of agreement among the participating provinces on maximizing rate of return, for Ontario maximization of return on its share of CPP funds is desirable as an objective because this is the only goal which ensures the greatest beneficial economic impact from their investment. This it not to say that the current government use of CPP funds for public purposes is bad or uneconomic; rather that the allocation of investment capital is improved when governments compete for debt financing in the capital market, as the capital market is the optimum, if not entirely perfect, allocator of funds. Since the CPP funds are raised from Ontario CPP contributors--who are more or less synonymous with Ontario taxpayers-- it makes sense to reinvest them to the benefit of Ontarians.

The Ontario Royal Commission took the position that the CPP investment fund was earning lower-than-market returns and that, "as a consequence, the best possible return is not available to benefit contributors."(30) Changes to the CPP investment structure were recommended, namely maturing bonds were to be,

"replaced by 20 year negotiable, fixed maturity date and market interest bonds, issued by provincial Crown corporations, accompanied by a guarantee by the province and by a certificate of the provincial treasurer that the proceeds of the bonds are being used to invest in fixed assets, or to refinance outstanding debt used to finance acquisition of fixed assets of that Crown corporation."(31)

This strategy presumes the demand for such public investment exists and that there are no better alternative uses of the funds. It also supposes that it is possible to measure returns ("social rates of return") from such investments. Such assumptions rest on weak ground.

We believe that if maximizing the rate of return/risk tradeoff is established as an explicit investment objective, market rates rather than elusive "social rates of return" must be the target.(32)

ECONOMIC DEVELOPMENT

Economic development was the original objective for the CPP Fund. The creation of the fund and its recycling to the regions of Canada for economic development had its origin in a perception by the provinces of a growing need for economic and social capital infrastructure. The opportunity

presented itself to finance such capital investment without having to raise taxes or resort to public borrowing, at a time when public borrowing in Canada was constrained by undeveloped world capital markets, and Ontario faced the need to fund the development of electric power facilities.

Economic development is not defined in the CPP legislation. Moreover, there is no explicit requirement either that the provinces use the funds for capital projects or account for the specific uses to which funds are put. We have defined economic development to mean activities which result in a rising standard of living. This definition is not very precise, but its refinement and assessment of the implications lie beyond the scope of this paper.

In Ontario, most of the CPP funds borrowed have been used for general purposes. Precisely how these uses have contributed to economic development is unknown. The Province has advanced the argument that since borrowed funds in total have been balanced by capital investment, and capital investment contributes to economic growth, the funds were used wisely.(33) This argument ignores the possibility

that other uses for the funds may have had a bigger economic development impact. It also assumes the Government of Ontario did the right thing by borrowing from the CPP rather than competing for funds in the private capital markets.

Today, the evidence suggests that in Ontario requirements for public capital investment are not as strong as in the 1960s and 1970s, and if the Province needs to borrow funds for these purposes they can be raised in the private capital market. The Province's net cash requirements, measured relative to Gross Provincial Product (GPP), have fallen steadily since 1982-83. Capital expenditures have ranged between $2.2 and $2.4 billion per annum and have declined as a percentage of total budget expenditures.[34] As mentioned previously, in the 1986-87 fiscal year, the Province declined to borrow most of its CPP entitlement and reduced its outstanding CPP debt; in the current fiscal year the Government plans not to borrow any CPP funds and to retire more CPP debt.[35] Debt management considerations rather than public capital creation needs, are presently driving Provincial attitudes toward borrowing from the CPP.

Those provinces refusing CPP funds to date--Ontario and B.C. --are doing so because substitute capital is available in the private capital markets or from other sources at more attractive rates and maturities. They, along with Alberta and Saskatchewan, have the stronger credit ratings and therefore can access the capital markets more easily and at lower cost. Today, the cost and terms of CPP borrowing are still attractive to those provinces with the lower credits. In prior years, when CPP borrowing terms were attractive, all provinces took up all available CPP funds.

Presumably, investment opportunities other than traditional public sector capital projects would have to be found to develop the economy. Investment of the Ontario portion of the CPP Fund surplus for economic development could strengthen security of CPP pensions, if only in a modest and indirect manner. The litmus test would be the potential to earn a spread between the cost of borrowing from the CPP and the rate of return earnable in alternative investments.

SUPPORT FOR GOVERNMENT BORROWING

As discussed earlier, Ontario has in the past borrowed substantially from public pension plans, including the CPP. By accessing these "captive" funds, the Province was able to avoid borrowing in the public capital market. If CPP, TSF and PSSF funds, in whole or in part, were to be invested in the private market, the Province would have to borrow publicly to finance its net cash requirements.

This possibility calls into question the availability and cost of public borrowing for Ontario. A detailed review of this question is not within the scope of this study;(36) however, a few, brief comments are offered to provide perspective. First, Ontario has a relatively high credit rating, reflecting primarily its strong and diversified economy. Second, there does not appear to have been a time in recent memory when access to the public market proved to be impossible. Third, the credit rating agencies consider the total debt of the Province, including borrowing from captive funds, for rating purposes. Fourth, a certain level of public borrowing on a regular basis may be helpful in ensuring that Ontario's credit standing is maintained. Fifth,

if the big Ontario public pension funds were invested in the capital markets a portion of those funds would probably be invested in Provincial bonds, or may displace other investors leading them to invest in Ontario bonds.

We have no way of predicting the Province's future financing requirements. However, there is no strong evidence to suggest that Ontario could not replace non-public with public borrowing on a phased basis.

THE CAISSE DE DEPOT AND THE ALBERTA HERITAGE FUND

Additional perspective on investment objectives can be obtained by reviewing the experience of the Caisse de Depot et Placement du Quebec (the Caisse) and Alberta's Heritage Saving Fund. Both funds express a public policy of regional economic development, or "enhancement".

Quebec argues that the choice of a QPP fund reserve level depends on the social and economic roles envisaged for the reserve. From the social perspective, the fund "ensures intergenerational equity, while economically it "contributes effectively" to growth.(37) The Caisse has precisely this role, which it undertakes in three ways: (i) by purchasing corporate shares in key sectors of the Quebec econo-

my to develop industrial infrastructure; (ii) by making loans to companies as bonds and mortgages; and (iii) by lending to the Quebec government, but at current market rates and terms.

The "Action Now For Tomorrow" document makes a strong statement with respect to the public policy thrust of the Caisse:

> "A diminished role for the Caisse de depot et placement in the economic development of Quebec is unacceptable."(38)

James E. Pesando, in a discussion paper for the Economic Council of Canada, analyzes the Caisse and the Alberta Heritage Fund, and finds that both institutions have objectives auxilliary to their primary functions.(39) Pesando argues that since the Caisse invests primarily in actively traded securities, it can exercise little control over economic development unless it attempts to influence the management objectives and practices of the companies it invests in. He finds evidence that Caisse directors are seeking to exercise such influence.

In examining the Alberta Heritage Fund, Pesando concludes this fund is really part of Alberta's short- and long-run fiscal policies. On the evidence, he questions whether the

investment of CPP funds could ever be divorced from political considerations. He speculates that the response of individuals and governments may depend on the CPP asset mix and suggests there is a strong case for linking a higher fund with investment in private sector securities, which action would promote the efficient allocation of financial capital.

Pesando questions the wisdom of governments using public sector pension funds for economic development, finding that a mis-allocation of resources occurs when government attempts to subsidize economic activity. Others, including the Economic Council of Canada have argued that it is inappropriate for government to use captive pension funds to pursue public policy goals and that other policy instruments are available.

A U.S. study of economic enhancement investing practices of state and local pension funds found that most chose only one objective--using their funds to encourage economic investment--and thus avoided having to rank goals.[40] A number of funds "targeted" their investments.

CONCLUSION

To conclude on investment objectives, a contingency reserve role for the Fund raises many issues which cause us to doubt the practicality of this option. Maximizing the Fund rate of return/risk trade-off is a viable objective and is consistent with using the Fund to promote economic development. Rate of return/risk criteria would be the basic yardstick by which economic development choices would be made and results measured, for example by the "spread" between Fund market earnings in comparison with what the Fund would have earned if invested solely in government long bonds. Lacking evidence to the contrary, we assume that the Province could replace non-public borrowing with public borrowing.

It is worth noting that the CPP Fund may serve as a "comfort factor", reassuring the public that the state takes its pension responsibilities seriously. The Ontario Royal Commission saw confidence in the Plan to be important and expressed the view that the Fund helped in this regard. Whether or not this is the case could be tested by market research.

V. INVESTMENT STRATEGIES FOR THE CANADA PENSION PLAN

New investment strategies would be required to deploy CPP funds to meet the investment objectives outlined in the previous section. We have identified four alternative strategies for Ontario to consider:

(i) the status quo;

(ii) investment in the private capital market;

(iii) private/public investments; and,

(iv) public sector investments.

THE STATUS QUO

Available CPP funds could continue to be borrowed by the Province for general purposes on an "as needed" basis and when the terms and conditions are more attractive than those available in the private capital market. We have concluded this approach would be unwise because:

- the Province could be accused of "opportunistic" use of CPP funds and its motives misconstrued; debt management objectives, not economic development--as envisaged originally--would control use of CPP funds;

- the federal government, as the residual borrower, would be forced to deal with potentially wide gyrations in its CPP borrowings driven by capital market conditions, and be required to take the "high-cost" money;

- the allocation of CPP investment capital would not be optimal. The Province would be using CPP funds simply as a cheap source of debt financing; and,

- such a policy could not be defended in terms of (i) maximizing rate of return; (ii) providing a contingency fund; or (iii) economic enhancement. Re-negotiation of the arrangements might be inevitable.

INVESTMENT IN THE PRIVATE CAPITAL MARKETS

If the proposition is accepted that the capital market, on balance, is the most efficient allocator of investment funds then maximum available CPP funds could be borrowed by the Province on the legislated terms and conditions, and then re-invested in the private capital market via either in-house or arm's-length investment management structures.

The above proposition is not accepted universally. Some will argue that captive pension funds should continue to be used for public purposes. However, as stated previously, the

Province of Ontario can fill all of its borrowing needs in the capital market and, if it wishes, can use public borrowing to fund public projects. The economic costs of such funds are reflected in the market rates of interest. By contrast, use of "captive" funds to by-pass the public bond market carries with it the risk of incurring economic opportunity costs because if such captive funds were instead invested in a broadly-based market investment portfolio, yields, and thus the true economic cost of the funds to the Government, could be higher.

Re-investment of the Ontario portion of the CPP Fund in the capital market would support economic development, would not undermine and could possibly enhance the Province's borrowing capacity, and would represent a more liquid investment mix to meet contingencies.

PRIVATE/PUBLIC INVESTMENTS

CPP funds could be borrowed by the Province and invested in projects which have social priority and have the potential to generate rates of return comparable to those obtainable in the private sector, but which need public investment to get them started. In this approach, public and private

capital work together, but no public subsidies are involved. Examples of such social priorities are venture capital for small business, non-conventional energy projects, high-technology research and development, mortgage financing, industry salvaging and regional development.

The difficulties here are considerable: identifying and ranking priorities would be politically contentious; the measurement of costs and benefits would be difficult, thus compromising accountability; it may be hard to avoid public subsidies; and, there may be concern about the Government misusing control over a growing pool of CPP funds to tamper with private sector activities. Moreover, this approach begs the question why the CPP is to be the source of funds for such purposes, rather than public borrowing, taxation or expenditure programs, particularly if public subsidies are provided. It could not support the contingency role.

PUBLIC SECTOR INVESTMENTS

CPP funds could be invested in projects which have social priority and for which private sector capital is unavailable either because the rate of return or risk cannot be

measured, the private rate of return is judged too low or the private risk judged too great. Government, in its economic role, may see opportunities for investments with considerable future returns which the private sector is either unwilling to undertake or would only undertake with substantial government support. Examples of such projects include the CANDU nuclear power technology, the DOME Stadium, Ontario Place and Go-Transit. Most projects would include public subsidies, at least in their start-up phases.

The principal objections to this approach are: (i) it has all of the faults of the previous one; (ii) the existence of a large fund could distort public priorities, encourage undue risk taking and create unrealistic expectations; and, (iii) the use of CPP funds to subsidize projects might be misconstrued as somehow undermining the security of the CPP. It could not support the contingency role.

CONCLUSION

To conclude on investment strategies, there are four basic directions in which to go; however, investment through the capital markets provides, on balance, the greatest measure of support to the objectives outlined previously.

VI. INVESTMENT MANAGEMENT STRUCTURES FOR THE CANADA PENSION PLAN

New investment management structures would be required to implement changes in Ontario's strategy for investing CPP surplus funds. Unless the present CPP legislation is changed, only the federal and provincial governments or their agencies may have direct access to surplus funds and governments are required to guarantee repayment. New investment structures must incorporate this reality. There are several possible structures, as outlined below.

1. Investment through the Consolidated Revenue Fund.
2. In-House Portfolio Investment.
3. Creation of a Semi-independent Government Agency.
4. Creation of an Arm's-length Investment Corporation along the lines of OMERS. Such an agency could also handle other public sector funds.

INVESTMENT THROUGH THE CONSOLIDATED REVENUE FUND

A Cabinet Committee, or similar political group, could be structured to invest CPP surplus funds in areas of public priority. Difficulties here include choosing and ranking priorities and resisting political pressures and lobbies. For example, regions with high unemployment could press for "their share" of the investment, there could be pressure to bail out industries in trouble, to mount or thwart takeover bids and to reduce foreign ownership. It could also prove difficult, if not impossible to measure returns. There is no guarantee such a structure would improve the economic efficiency of the investment of CPP surplus funds.

IN-HOUSE PORTFOLIO MANAGEMENT

A committee of bureaucrats, or separate department, could be structured to invest the CPP surplus funds in the capital markets, or to allocate/auction them to external managers. Funds would be earmarked for this purpose. The major drawback could be the opportunity for political tampering in the affairs of private sector corporations through equity ownership. Moreover, substantial political pressures could be expected along the above lines.

SEMI-INDEPENDENT GOVERNMENT AGENCY

The Government could create a Crown agency and appoint bureaucrats and private sector managers to oversee investment of the Ontario portion of CPP surplus funds. Funds could flow directly to the agency. Difficulties here are similar to those noted for the above two options. Moreover, it may in practice be troublesome defining and separating responsibilities and accountability.

ARM'S-LENGTH CROWN CORPORATION/AGENCY

The Government could create an independent crown corporation or agency to invest the surplus CPP funds. Funds could flow directly to the corporation from the CPP. The corporation could operate under broad investment guidelines. The Government could choose to see any net earnings reinvested through the corporation or declared as a dividend to the Consolidated Revenue Fund. The corporation would be more or less immune from political tampering. No doubt the Government would experience some political pressures related to the application of net earnings and other matters.

COMBINATIONS

Combinations of the above structures could be possible. For example, the Government could choose to use CPP funds for deficit financing as required, for other Provincial purposes, and to invest any balance in the capital markets. However, such combinations may be hard to rationalize. For instance, it would be difficult to make the argument for the objective of maximizing rate of return if only those funds residual to deficit financing needs were to be available for investment in the capital markets.

In the event the capital market route is chosen, the experience of existing institutions such as OMERS should be drawn upon. The large sums involved suggest that initially only the growth in the fund would be redirected to the market. As experience was gained, maturing Government debt to the CPP could be invested in the private market so that, by 2008 or thereabouts all of the Ontario share of the CPP investment fund would be in the private sector. Analysis of potential capital market impacts by Todd and Bossons suggests there would be no adverse effects of flowing the Ontario portion of the CPP Fund through the capital markets.(41)

CONCLUSION

Among the alternatives, the crown corporation/agency would be probably the least contentious politically. This structure would allow the efficient pursuit of either the contingency reserve or economic development objectives, and allow the combining of CPP funds with TSF and PSSF and other funds for investment.(42)

VII. FEDERAL-PROVINCIAL IMPLICATIONS

Under present legislation the provinces--and presumably the federal government--are allowed to use for any purpose the CPP funds which they borrow, provided they guarantee repayment of the principal and interest. It is not clear whether or not the original designers envisaged provinces taking the funds and then re-investing them in financial instruments. In any event, there is no prohibition against this.

Ontario is entitled to borrow more than one half the CPP surplus because of the province's relatively large shares of combined employment and earnings of the participating provinces. Changes in Ontario's approach to accessing and investing CPP surplus funds would be of interest to other provinces and to the federal government. Interest would be greatest, of course, if Ontario proposed changes in investment strategy for all CPP participating governments, for instance the investment of the CPP surplus allotments for all provinces in the private capital markets. Such a proposal might not be well received by those provinces--and there are some--which feel disadvantaged when it comes to capital market access.

If Ontario decides to pursue any of the go-it-alone options presented in this study there are no federal-provincial implications which would prevent this. Ironically, if difficulties were to arise they would probably do so in the case of the status quo. That scenario could see Ontario using debt management criteria to draw on its CPP allotment, in which case the Province's borrowings would fluctuate according to capital market conditions.

If economic and fiscal conditions were such that, as in the 1986-87 fiscal year, Ontario turned down the CPP borrowing option either totally or substantially for a number of successive years, a number of things could happen: (i) the federal government, if it decided the CPP debt was too expensive, could request a change in the repayment terms; (ii) the federal government could attempt to gain political points by proposing (or simply implementing with respect to its share) alternative investment strategies for the CPP surplus e.g. regional development, small business promotion, and energy projects; and, (iii) those provinces with lower credit ratings, higher borrowing costs, limited debt-carrying ability and perhaps limited access to the credit markets could demand a review of the investment options and a greater than proportionate share of CPP funds for themselves.

Ontario's share of the CPP surplus is very large. Investment of these funds in other regions of Canada could, depending on the context, have intergovernmental implications. There would also be issues arising out of a decision to re-lend Ontario CPP funds to other provinces, or to Ontario local governments. Does the Government of Ontario want to put itself in the position where other provinces could become indebted to Ontario? Would such a development compromise in any way future negotiation of fiscal arrangements? Would an offer to re-lend CPP funds to other provinces be misconstrued by some as an Ontario "handout"? How would Ontario deal with the situation of a province or municipality which could not meet its repayment obligations? Could the Government of Ontario lend to, say. Newfoundland, yet turn down Windsor or Sudbury?

VIII. PUBLIC PERCEPTIONS

The evaluation of public perceptions of the Canada Pension Plan and its investment fund is important to the consideration of options. Such evaluation was not part of our mandate. However, our research suggests there is a danger current arrangements are not clearly understood and that changes in them could be easily misconstrued. We offer the following brief observations for consideration by the Task Force:

- If the Government decides not to take all available CPP funds it may be accused of not taking "what is ours" and being incapable of seeing opportunities for investment in the province. Various lobby groups will have lots of suggestions.

- If the Government decides to implement new arrangements to invest the funds it should take great care to communicate the rationale and expected impacts. Any asset mix may raise questions.

- Arm's-length investment in the capital market may be the least difficult politically, the most defensible from an economic standpoint and the most acceptable publicly.

- Investment of CPP funds abroad could create political traumas. For example, certain countries, firms or activities could be perceived by some groups to be undesirable as targets for investment. Events abroad, over which the Government would have no control, could precipitate acrimonious debate and strong pressure to change investments.

IX. CONCLUSIONS AND RECOMMENDATIONS

The following are the major conclusions of our study of CPP Fund investment options and implications:

1. The Canada Pension Plan is a social insurance scheme and, as such, is fundamentally different from employer-sponsored pension arrangements.

2. Investment objectives for the CPP Fund lack clarity.

3. There are no legal impediments to Ontario adopting new investment objectives and strategies in respect of its portion of the CPP Fund.

4. All new investment options have political implications which should be evaluated with care.

5. Re-investment of the Ontario portion of the Fund in the capital markets by having as a primary objective maximizing the rate of return/risk trade-off has the potential to earn a spread and promote economic development of the province.

6. The most effective and perhaps least contentious investment strategy would be phased-in investment of the funds to the private capital markets.

7. An arm's-length Crown agency would be the most appropriate investment management structure to make capital market investments and manage the portfolio.

8. There are no significant intergovernmental implications if Ontario changes it approach, provided it does not seek participation of the other provinces or intend to engage in direct re-lending to other governments.

We recommend:

1. The Task Force advise the Government to adopt the objective of maximizing the rate of return/risk trade-off on the investment of CPP surplus funds. This objective would best promote the objective of economic development and in the long run improve the security of the pension promise, at the margin.

2. The Task Force advise the Government that this objective can be achieved best by the strategy of investing the Ontario portion of the CPP surplus funds in the private capital markets through an arm's-length Crown agency. (The agencies assets would consist of capital market investments; liabilities would be fixed-rate, long-term debt owed the CPP. The Government of Ontario's "equity" in the agency at any moment would represent the difference between assets and liabilities and could be positive or negative.)

3. The Task Force apprise the Government as fully as possible of the political, public finance and other implications of adopting the above recommendations.

APPENDIX A: NON-APPLICABILITY OF PRIVATE PENSION PLAN STANDARDS TO THE CANADA PENSION PLAN

If the CPP were to be assessed according to the actuarial funding standards required of private pension plans, the plan would have had an unfunded actuarial liability in 1985 of $280-$295 billion, the equivalent of more than one half the current National Income. This level of unfunded liability is also equivalent to 36 to 38 years of total fund income--contributions plus investment income--at 1985-86 levels.

The unfunded liability is theoretically the amount which would have had to have been invested in the year following the valuation date to allow the fund to cover its future liabilities. The Chief Actuary's report identifies the main purposes of normal actuarial funding as:

- to meet the estimated real costs of pension obligations as benefits are earned and avoid deferment of costs;
- secure the pension assets by transfer to a trustee;
- stabilize pension costs.

Clearly, these standards are not applied to the Canada Pension Plan. The plan has a very modest level of funding only and the full costs of pensions are not set aside as earned but deferred substantially. Assets are managed by a trustee, in this case the state, but the state's role involves inherent conflicts.

The Chief Actuary advises,

> "while it is possible to calculate a 'normal actuarial cost' (current service rate), there appear to be great difficulties not only in applying the technique of 'actuarial funding' but in applying the objectives or even some of the basic concepts."

The Chief Actuary goes on to say,

> "On a national basis, it is not clear to what extent pensions can be prefunded and thus a 'deferment of costs' avoided...It is often feared that the colossal investment funds that are generated would lead either to unwarranted government projects or to indirect government control over the private sector through the investment of social insurance funds. In any case, it is not easy to demonstrate how the payment of pensions in the distant future would be facilitated or savings increased, although the direct link between concurrent contributions and benefits payments would be eliminated and future productivity might well be enhanced by prudent investments.

> "Achieving security through funding does not seem possible in social insurance, because a country cannot divest itself of its pension obligations, unless it were to export the required savings and this did not itself constitute a reduction in security...stability of costs reflected in contribution rates can usually be achieved without recourse to actuarial funding....the application of the principles of 'actuarial funding' is usually considered inappropriate in the field of social insurance."

The Ontario Royal Commission is perhaps more direct in its criticism of the application of an unfunded liability to the CPP:

> "...to relate this (unfunded) liability to the soundness of the Canada Pension Plan, which is premised on continuing in perpetuity, is meaningless...it indicates an imperfect understanding of the nature of a social insurance program."

APPENDIX B:

CANADA PENSION PLAN PERFORMANCE AND PROJECTIONS

Actuarial projections are available for the Canada Pension Plan to the year 2100, or more than a century from today. These projections are based on economic and population growth assumptions.

The most important economic assumptions are that, from 1993 onwards, real wages increase by 1.5 per cent per annum and the annual real rate of interest earned by the CPP fund is 2.5 per cent. Rates of interest may have a significant effect on the ratio of the fund to expenditures, but not on contribution rates unless a relatively high degree of funding is postulated.

The CPP population, that is the Canadian population excluding Quebec, is projected to almost double by the year 2100 when it will reach 37.9 million persons. The present trend of a rising ratio of the population aged 65 and over to the population aged 20-64 is projected to continue, rising from 17.1 per cent in 1981 to 35.5 per cent in 2100. The long-term downtrend in the birth rate is expected to continue

past the year 2000 and stabilize around 12.7 births per 1000 of population. Fertility, the number of live births per 1000 females, is assumed to return to 2.0 over the next 25 years, the level of 1972. Population will also grow under the impact of migration. The fund projections assume a constant ratio of net immigrants to population of 0.3 per cent. Mortality will drain population less rapidly in the future: people born in the year 2050 and later are will have a life expectancy of 76.6 years for males and 83.8 years for females. This is a considerable lengthening of life expectancy from the current levels of 71.9 and 19.0 years respectively for males and females.

In 1986 contributions amounted to $4.9 billion and interest on the fund to $3.3 billion for a total income of $8.2 billion. Benefits and expenses totaled $5.5 billion. Thus, the CPP fund grew by $2.7 billion. Expenditures amounted to approximately 5 per cent of the total fund. In the year 2100, or over a century from now, current projections are that contributions will amount to $7.6 trillion and fund interest to $0.9 trillion. Benefits plus expenses would total $7.7 trillion, and the fund would rise to $16.1 trillion. Over the 114 year period, the contribution rate

would rise progressively from 3.6 per cent to 11.40 per cent of contributory earnings. Despite this, the ratio of the fund to expenditures would fall from 5 per cent to 2 per cent.

APPENDIX C:
CANADA PENSION PLAN LEGISLATION

Financial provisions under Section 110 of the Canada Pension Plan Act set up the CPP Account to which contributions and interest are credited and from which benefits and costs are paid out. No payments can be made if there are insufficient funds in the CPP Account. Section 111 establishes a Canada Pension Plan Investment Fund. Under Section 112, the CPP Investment Fund is to be invested in securities of the provinces and Canada.

Provinces have access to funds in proportion to their share of total contributions. If any province does not take up its full entitlement, Canada is required to borrow those residual funds. The terms of borrowing are stipulated in Section 113, which states that excess CPP funds are to be invested in non-negotiable, non-transferable bonds of 20 year or shorter maturity. For 20 year bonds, the interest rate is set as the average yield to maturity of all federal marketable bonds of terms to maturity of 20 years or longer. For borrowings from the CPP Fund for maturities of less than 20 years, interest will be based on the average yield to maturity of federal marketable securities of comparable

term to maturity. The amount available for borrowing is equal to contributions plus interest less benefits plus administrative costs (Section 114.2).

Amendments of substance to the CPP requires the approval of at least 2/3 of the included provinces, having not less than 2/3 of the population (115.4). A report is to be made by the Chief Actuary every five years (116). An Advisory Committee is required under Section 117, comprised of no more than 16 members representing employees, employers, self-employed persons and the public. The Committee is charged to review the operation of the CPP, the state of the CPP investment fund and the adequacy of benefits and coverage.

The CPP Act does not require the CPP Investment Fund to earn the best possible return commensurate with acceptable risk. Nor does the Act require any accounting by the provinces of the uses to which they put the CPP funds. There is no requirement for an investment policy committee. Effectively, the Act provides the provinces and Canada with a captive source of funds with interest payable at market

rates for federal securities. Security can take the form of: (a) an obligation of the Government of Canada; (b) on obligation of a province or an obligation of any provincial agent of the Crown guaranteed by the province.

FOOTNOTES

1. J. Todd and J. Bossons, "The Impact of the Investment of Public Sector Pension Funds on the Canadian Capital Markets", Toronto, Ont., 1986.

2. For an overview of the legislation see, "Canada Pension Plan and Social Security Legislation, 1984-85", CCH Canadian Limited, Don Mills, Ontario, December, 1984.

3. Ibid.

4. The level of pension is targeted to replace a given amount of pre-retirement income. This target is a "social target", both in terms of the replacement rate set and the level of income against which it is to be applied. The rate is assessed on earnings above the yearly basic exemption and up to the average industrial wage (AIW). The CPP is designed to replace 25 per cent of the AIW for those plan members earning this level of pay or higher.

5. Speech by the Minister of National Health and Welfare, House of Commons Debates 1963, p. 2340 ff.

6. Although Quebec opted ultimately to introduce its own pension plan, the Quebec Pension Plan was, and is today, uniform with the Canada Pension Plan.

7. Bill C-116, "An Act to Amend the Canada Pension Plan and the Federal Court Act." This legislation was given first reading June 11, 1986 and received Royal Assent June 27, 1986.

8. The intergenerational equity issue is not discussed in this study; however, it is considered at some length in the Report of the Royal Commission on the Status of Pensions in Ontario, vol. V, "Ontario and the Canada Pension Plan", Ontario Government Printer, Queen's Printer, Queen's Park, Ont., 1980.

9. See bibliography.

10. Ontario Royal Commission, op.cit.

11. For example see, Claude Castonguay, "Public and Private Dimensions of Pension Reform", an address to the National Pensions Conference, Ottawa, 1981; also "Pension Policy in Canada", submission by the Board of Trade of Metropolitan Toronto, January, 1981.

12. Ontario Royal Commission, op.cit., p. 102.

13. The pension the individual receives from the RRSP may be viewed as a reward for foregoing current consumption and lowering current taxes.

14. Donald Ezra, "The Nature of the Pension Agreement", A discussion paper prepared for the Ontario Task Force on the Investment of Public Sector Pension Funds, Frank Russell Canada, Toronto, 1987.

15. For a discussion of funding standards see, "Comparison of Private and Public Sector Pension Plans", W. M. Mercer Limited, Toronto, Ont. 1987.

16. The CPP legislation is silent on the question of ultimate liability to make good the pension promise, but political realities suggest the liability is a joint federal-provincial one. Both levels of government would be under pressure to meet the promise and both share the major tax fields which generate the ability to pay.

17. The establishment of the CPP could be construed as a voluntary act in the sense it was created by the elected representatives of the people.

18. There are several reasons why the CPP is not and almost certainly never will be fully funded. First, when a pension plan which is national in scope is implemented, it is politically unattractive and probably unacceptable socially to phase in full pensions over decades. Persons near retirement age when the plan was introduced would receive a pittance. Moreover, introduction of a fully-funded plan would require substantial contributions from younger workers when their interest in pensions would be low and needs for family and other purposes high. A massive fund would be created with serious consequences for econ-

omic growth, for the stability of the capital markets and for economic concentration. As well, the existence of a huge fund could bring unbearable pressures on politicians for higher benefits, which in the end would be self-defeating. It is the state's ability to tax and the taxpayers' willingness to pay which secures the pension promise. This reality is widely accepted among the groups which have examined and reported on CPP matters.

19. for a discussion of subsidies in the CPP see, Ontario Royal Commission, ibid.

20. See, "Canada Pension Plan Statutory Actuarial Report No. 10, As At December 31, 1986", Department of Insurance Canada, Ottawa, Ont., 1987; and, "Canada Pension Plan Statistical Bulletin", National Health and Welfare Canada, quarterly, Ottawa, Ont.

21. For details of interest rate policy regarding CPP loans see Appendix C.

22. This assessment is based on intergovernmental discussions leading up to the 1986 CPP reforms. We have not contacted each government to obtain current views, but doubt they will have changed materially

23. Some discussion of simulations and results can be found in, "Canada Pension Plan Actuarial Report No. 10", op.cit.

24. See Ontario Budgets, 1975 through 1979, for details.

25. Hon. W. Darcy McKeough, "Ontario's Borrowing and Public Capital Creation", 1978 Ontario Budget, Budget Paper A, Queen's Park, Ontario, p. 18.

26. For a discussion of economic development and enhancement see, Arthur J. Smith, "Pension Fund Investment and Economic Enhancement", a study prepared for OMERS, Toronto, Ontario, 1986. See also, Bryne B. Purchase, "Economic Enhancement: Its Meaning and Implications", Ontario Treasury, Queen's Park, Toronto, Ont., June, 1987.

27. Individuals may succeed in insuring against the demise of the state by hoarding precious metals and other scarce commodities.

28. For calculations of the effect of the CPP Fund on contribution rates see, W. M. Mercer, op.cit. p.104-107.

29. See Appendix C for details of conditions which apply to the issuance of bonds to the Fund. The federal Minister of Finance has the power to call loans prior to maturity under Section 113. It is very likely that in such circumstances the issue of debt repayment would become politicized and considered alongside other options such as reducing pension benefits or raising taxes.

30. Ontario Royal Commission, op.cit.

31. Ibid. Also, a study by the Ontario Treasury estimates that the CPP investment fund would have been $1 billion larger if market borrowing criteria had been applied, but this trend is now reversing as interest rates trend downward. Treasury is recommending a new interest rate/term structure formula with a wider selection of maturities and direct access to the CPP Fund by provincial crown agencies such as Ontario Hydro, on the strength of the Provincial guarantee.

32. Difficulties in estimating social rates of return have been widely acknowledged. For example see, The Ontario Royal Commission, op. cit.

33. See Hon. Frank S. Miller, Ontario Budget 1981, Budget Paper A, "Fiscal Developments in Ontario in the 1970s", Queen's Park, Ontario, 1981, and various other Ontario budgets and budget papers.

34. See, "Economic and Fiscal Review, Province of Ontario", Ontario Treasury, Queen's Park, Ontario, November, 1986.

35. Hon. Robert F. Nixon, "Ontario Budget 1987", Queen's Park, Toronto, Ont., May, 1987.

36. See Peter Andersen's paper for the Task Force on market /non-market rates of return and performance (in preparation).

37. Government of Quebec, "Action Now For Tomorrow, The Quebec Policy on Retirement Income Policy", Government Printer, Quebec City, Quebec, 1985.

38. Ibid.

39. James E. Pesando, "An Economic Analysis of Government Investment Corporations, with Attention to the Caisse de Depot et Placement du Quebec and the Alberta Heritage Fund", Discussion Paper No. 277, Economic Council of Canada, Ottawa, Ont., 1985.

40. Petersen and Spain, "Alternative Investing by State and Local Pension Funds: Concepts, Issues and Practices", Municipal Finance Officers Association, Government Finance Research Center, Washington, D.C., December, 1980.

41. J. Todd and J. Bossons, op.cit.

42. For another perspective on investment structure see paper for the Task Force by W. M. Mercer Limited, (in preparation).